

GenCore version 4.5
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OM protein - protein search, using sw model

Run on: August 11, 2002, 09:26:45 ; Search time 66.82 Seconds

(without alignments)
3769,900 Million cell updates/sec

Title: US-09-528-031-2

Perfect score: 7308

Sequence: 1 MKDIDGKEIIPGCRSV.....DSSRFYMFMAENKAVK 1437

Scoring table:

BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 528882 seqs, 175299045 residues \$28882

ALIGNMENTS

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Listing first 45 summaries

Database : Pending_Patents_AA_New:*
1: /cgn2_6/ptodata/2/paa/US06_NEW_COMB.pep:*
2: /cgn2_6/ptodata/2/paa/US07_NEW_COMB.pep:*
3: /cgn2_6/ptodata/2/paa/US08_NEW_COMB.pep:*
4: /cgn2_6/ptodata/2/paa/US09_NEW_COMB.pep:*
5: /cgn2_6/ptodata/2/paa/US10_NEW_COMB.pep:*
6: /cgn2_6/ptodata/2/paa/US10_NEW_COMB.pep:*
7: /cgn2_6/ptodata/2/paa/US60_NEW_COMB.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	7297	99.8	1437	US-10-162-012-38	Sequence 38, Appl
2	7293	99.8	1437	US-09-647-140A-4	Sequence 4, Appl
3	7293	99.8	1437	US-10-154-452-2	Sequence 2, Appl
4	7285	99.7	1437	US-60-389-987-563	Sequence 563, App
5	6674	91.3	1325	US-10-154-452-6	Sequence 6, Appl
6	2663.5	36.4	1382	US-10-087-782A-31	Sequence 31, Appl
7	2540.5	34.8	1325	US-10-162-012-34	Sequence 34, Appl
8	2049.5	28.0	1325	US-09-647-140A-2	Sequence 2, Appl
9	2034.5	27.8	1388	US-60-389-987-1718	Sequence 1718, Ap
10	2023.5	27.7	1510	US-09-935-625-26957	Sequence 26957, A
11	2023.5	27.7	1529	US-09-935-625-26956	Sequence 26956, A
12	2023.5	27.7	1622	US-09-935-625-26955	Sequence 26955, A
13	2013.5	27.6	1510	US-09-935-625-26574	Sequence 26574, A
14	2013.5	27.6	1529	US-09-935-625-26573	Sequence 26573, A
15	2013.5	27.6	1622	US-09-935-625-26572	Sequence 26572, A
16	1992	27.3	1499	US-09-935-625-3013	Sequence 3013, Ap
17	1992	27.3	1499	US-09-935-625-25379	Sequence 25379, A
18	1992	27.3	1530	US-09-935-625-3012	Sequence 3012, Ap
19	1992	27.3	1530	US-09-935-625-25378	Sequence 25378, A
20	1992	27.3	1623	US-09-935-625-3011	Sequence 3011, Ap
21	1992	27.3	1623	US-09-935-625-25377	Sequence 25377, A
22	1988	27.2	1507	US-09-935-625-3328	Sequence 3328, Ap
23	1988	27.2	1507	US-09-935-625-26043	Sequence 26043, A
24	1988	27.2	1538	US-09-935-625-3327	Sequence 3327, Ap
25	1988	27.2	1538	US-09-935-625-26042	Sequence 26042, A
26	1988	27.2	1631	US-09-935-625-3326	Sequence 3326, Ap

27	1988	27.2	1631	5	US-09-935-625-26041	Sequence 26041, A
28	1984.5	27.2	1494	7	US-60-360-039-6697	Sequence 6697, Ap
29	1983.5	27.1	1515	7	US-60-360-039-1637	Sequence 1637, Ap
30	1941	26.6	1527	5	US-09-647-140A-6	Sequence 6, Appl
31	1923	26.3	1581	6	US-10-179-131-6804	Sequence 6804, Ap
32	1897	26.0	1573	7	US-60-360-039-6687	Sequence 6687, Ap
33	1897	26.0	1573	7	US-60-360-039-6868	Sequence 6868, Ap
34	1896.5	26.0	1508	7	US-60-360-039-4104	Sequence 4104, Ap
35	1874.5	25.6	1444	7	US-60-360-039-2241	Sequence 2241, Ap
36	1828	25.0	1355	5	US-09-935-625-7277	Sequence 7277, Ap
37	1828	25.0	1355	5	US-09-935-625-16233	Sequence 16233, A
38	1819.5	24.9	1516	5	US-09-935-625-5376	Sequence 5376, Ap
39	1819.5	24.9	1516	5	US-09-935-625-8196	Sequence 8196, Ap
40	1819.5	24.9	1516	5	US-09-935-625-20409	Sequence 20409, A
41	1819.5	24.9	1516	5	US-09-935-625-25430	Sequence 25430, A
42	1806	24.7	1251	5	US-09-935-625-5377	Sequence 5377, Ap
43	1806	24.7	1251	5	US-09-935-625-8197	Sequence 8197, Ap
44	1806	24.7	1251	5	US-09-935-625-20410	Sequence 20410, A
45	1806	24.7	1251	5	US-09-935-625-25431	Sequence 25431, A

RESULT 1
US-10-162-012-38
Sequence 38, Application US/10162012
GENERAL INFORMATION:
APPLICANT: Curtis, Rory A.J.
APPLICANT: Silos-Santiago, Immaculada
TITLE OF INVENTION: NOVEL HUMAN ION CHANNEL AND TRANSPORTER FAMILY MEMBERS
FILE REFERENCE: 10448-190001
CURRENT FILING DATE: 2002-06-04
PRIOR APPLICATION NUMBER: US/10/162,012
PRIOR FILING DATE: 2000-06-06
PRIOR APPLICATION NUMBER: US 60/209,845
PRIOR FILING DATE: 2000-06-06
PRIOR APPLICATION NUMBER: US 09/875,321
PRIOR FILING DATE: 2001-06-06
PRIOR APPLICATION NUMBER: PCT/US01/18340
PRIOR FILING DATE: 2001-06-06
PRIOR APPLICATION NUMBER: US 60/209,257
PRIOR FILING DATE: 2000-06-05
PRIOR APPLICATION NUMBER: US 09/875,423
PRIOR FILING DATE: 2001-06-05
PRIOR APPLICATION NUMBER: PCT/US01/18398
PRIOR FILING DATE: 2001-06-05
PRIOR APPLICATION NUMBER: US 60/209,238
PRIOR FILING DATE: 2000-06-05
PRIOR APPLICATION NUMBER: US 09/875,363
PRIOR FILING DATE: 2001-06-05
PRIOR APPLICATION NUMBER: PCT/US01/18247
PRIOR FILING DATE: 2001-06-05
PRIOR APPLICATION NUMBER: US 60/227,068
PRIOR FILING DATE: 2000-08-22
PRIOR APPLICATION NUMBER: US 09/928,530
PRIOR FILING DATE: 2001-08-13
PRIOR APPLICATION NUMBER: PCT/US01/25475
PRIOR FILING DATE: 2001-08-15
PRIOR APPLICATION NUMBER: US 60/226,770
PRIOR FILING DATE: 2000-08-21
PRIOR APPLICATION NUMBER: US 09/934,421
PRIOR FILING DATE: 2001-08-21
PRIOR APPLICATION NUMBER: PCT/US01/26096
PRIOR FILING DATE: 2001-08-21
PRIOR APPLICATION NUMBER: US 60/279,281
PRIOR FILING DATE: 2001-03-28
PRIOR APPLICATION NUMBER: US 10/109,029
PRIOR FILING DATE: 2002-03-28
PRIOR APPLICATION NUMBER: PCT/US02/09728
PRIOR FILING DATE: 2002-03-28
PRIOR APPLICATION NUMBER: US 60/290,288
PRIOR FILING DATE: 2001-05-11

; PRIOR APPLICATION NUMBER: US (not assigned)
 ; PRIOR FILING DATE: 2002-05-13
 ; NUMBER OF SEQ ID NOS: 48
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 38
 ; LENGTH: 1437
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-10-162-012-38

Query Match 99.8%; Score 7297; DB 6; Length 1437;
 Best Local Similarity 99.8%; Pred. No. 0;
 Matches 1435; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY	1	MKIDIGKEYIIPGSRVRETRSTSGTRHREDSKFRRTTRPLECODALETARAGLS	60
DB	1	MKIDIGKEYIIPGSRVRETRSTSGTRHREDSKFRRTTRPLECODALETARAGLS	60
QY	61	LDASMSHSLRILDEHPKCYHNGLSALKPRTTCKHQHPVDNAGLSCMTFSWLSLAR	120
DB	61	LDASMSHSLRILDEHPKCYHNGLSALKPRTTCKHQHPVDNAGLSCMTFSWLSLAR	120
QY	121	VAARKKELSMEDVWSLSKSHSSDVNCRRLERLMOEELNEVGPDAAASLRVVMIFCRLI	180
DB	121	VAARKKELSMEDVWSLSKSHSSDVNCRRLERLMOEELNEVGPDAAASLRVVMIFCRLI	180
QY	181	LSIVCLMTIQLAGFSGPAFWKHLEETOESNLQYSLLVGLLTETIVRSWLSLTM	240
DB	181	LSIVCLMTIQLAGFSGPAFWKHLEETOESNLQYSLLVGLLTETIVRSWLSLTM	240
QY	241	ALMYRTGVRLGAILTMAFKKILKLNKIKESLGEILINCSNDQRMFEAAVGSLLAGG	300
DB	241	ALMYRTGVRLGAILTMAFKKILKLNKIKESLGEILINCSNDQRMFEAAVGSLLAGG	300
QY	301	PVVAIIIGMIYNNVILIGPTGIGSAVLETPAMMFASRLTAYFRKCVATDERVOKME	360
DB	301	PVVAIIIGMIYNNVILIGPTGIGSAVLETPAMMFASRLTAYFRKCVATDERVOKME	360
QY	361	VLTYIFIKMYAWKAFSQSVQKIREERILKAGYFOSITVGVAPIVVIVIASVTFV	420
DB	361	VLTYIFIKMYAWKAFSQSVQKIREERILKAGYFOSITVGVAPIVVIVIASVTFV	420
QY	421	HMTLGFDTLAAQAFVYVYVNSMTFALKVTPESVKSISEASVAVDRKSLFLMEEVMIK	480
DB	421	HMTLGFDTLAAQAFVYVYVNSMTFALKVTPESVKSISEASVAVDRKSLFLMEEVMIK	480
QY	481	NKSPASHIKEMKNATLAMSSSHSSIONSPLPKMKKDRASRGKKEKVRQLOPTEHOA	540
DB	481	NKSPASHIKEMKNATLAMSSSHSSIONSPLPKMKKDRASRGKKEKVRQLOPTEHOA	540
QY	541	VLAEOGHLILDSDEPSPREEEGKHILGHLRLQRTLSIDELIOGKLVGICGSVSG	600
DB	541	VLAEOGHLILDSDEPSPREEEGKHILGHLRLQRTLSIDELIOGKLVGICGSVSG	600
QY	601	KTSLSIAIIGQMTLBSGSAISGTFAYVAQOAMILNATLNDNLLFGKEYDERNSVLNS	660
DB	601	KTSLSIAIIGQMTLBSGSAISGTFAYVAQOAMILNATLNDNLLFGKEYDERNSVLNS	660
QY	661	CCLRPLATIPSSDLTEIGRGANLSCGQORISLARALSDSISYLLDDPLSALDHVG	720
DB	661	CCLRPLATIPSSDLTEIGRGANLSCGQORISLARALSDSISYLLDDPLSALDHVG	720
QY	721	NHIFNSAIRKHLKSKTVLFTVHOLQYLVDCDEVIFMKEGCITFGRTHHEELMNGDATT	780
DB	721	NHIFNSAIRKHLKSKTVLFTVHOLQYLVDCDEVIFMKEGCITFGRTHHEELMNGDATT	780
QY	781	FNNLLIGETPPVINSKKESSGQKSSQDKGPTGTSTKKAAYPEEGQLVLEEGQGS	840
DB	781	FNNLLIGETPPVINSKKESSGQKSSQDKGPTGTGTGSKKAAVPEEGQLVLEEGQGS	840
QY	841	VPSVYGVYIOAGGPIALFYIALFMNLVNGSAFTWMLSVYTKQSGCMTYTRGNETS	900
DB	841	VPSVYGVYIOAGGPIALFYIALFMNLVNGSAFTWMLSVYTKQSGCMTYTRGNETS	900

DB	841	VPSVYGVYIOAGGPIALFYIALFMNLVNGSAFTWMLSVYTKQSGCMTYTRGNETS	900
QY	901	VDSMKDNPMHQYVYASIALSMAYVLLKAI RGVVFPKGLTRASSRHLDELFRRLSPM	960
DB	901	VDSMKDNPMHQYVYASIALSMAYVLLKAI RGVVFPKGLTRASSRHLDELFRRLSPM	960
QY	961	KFEDTTPGRLNRFSSKDMDEVRLPFOAMFIQNVILVFCYGMAGVFPNVLAVGP	1020
DB	961	KFEDTTPGRLNRFSSKDMDEVRLPFOAMFIQNVILVFCYGMAGVFPNVLAVGP	1020
QY	1021	LVILFSLVHSRVLIRELRLDNIQSPFLSHSTSSIOGIATTHAYNKGOEFLHROEL	1080
DB	1021	LVILFSLVHSRVLIRELRLDNIQSPFLSHSTSSIOGIATTHAYNKGOEFLHROEL	1080
QY	1081	LDNQAPFFLFTCAMRLAVRLDLISALITTTGLMIVLHNGQIPPAVAGLASYAVOLT	1140
DB	1081	LDNQAPFFLFTCAMRLAVRLDLISALITTTGLMIVLHNGQIPPAVAGLASYAVOLT	1140
QY	1141	GLEQFTVRLASETEARETSVERINHYIKTSLSEAPARIKKNKAPSPDPQEGEVTFENAE	1200
DB	1141	GLEQFTVRLASETEARETSVERINHYIKTSLSEAPARIKKNKAPSPDPQEGEVTFENAE	1200
QY	1201	RYRENPLVLAKVYFTIKPREKIGIVRTSGSKSLGMALFRLVELSGGCIKIDVRI	1260
DB	1201	RYRENPLVLAKVYFTIKPREKIGIVRTSGSKSLGMALFRLVELSGGCIKIDVRI	1260
QY	1261	IGLADRSKLSIIPQEPVLSGTVRSNLDPEFNOYTEDQIMDALERTHMKECIAQLPLKE	1320
DB	1261	IGLADRSKLSIIPQEPVLSGTVRSNLDPEFNOYTEDQIMDALERTHMKECIAQLPLKE	1320
QY	1321	SEWENGDNFSVGERQLLCTARALLRCKIILIDEATPAADTETDLLIOETIREAFDCT	1380
DB	1321	SEWENGDNFSVGERQLLCTARALLRCKIILIDEATPAADTETDLLIOETIREAFDCT	1380
QY	1381	MLTIAHRLHTVLGSDRIMVLAOGVVEFDPVSVLLSNDSSRFYAMFAAENKVAVK	1437
DB	1381	MLTIAHRLHTVLGSDRIMVLAOGVVEFDPVSVLLSNDSSRFYAMFAAENKVAVK	1437

RESULT 2
 US-09-647-140A-4
 ; Sequence 4: Application US/09647140A
 ; GENERAL INFORMATION:
 ; APPLICANT: Fox Chase Cancer Center
 ; APPLICANT: Krub, Gary D.
 ; APPLICANT: Lee, Kun
 ; APPLICANT: Belinsky, Martin G.
 ; APPLICANT: Bain, Lisa J.
 ; TITLE OF INVENTION: MRP-Related ABC Transporter Encoding
 ; FILE REFERENCE: FCCC 98-02
 ; CURRENT FILING DATE: 2001-05-21
 ; PRIOR APPLICATION NUMBER: PCT/US99/06644
 ; PRIOR FILING DATE: 1999-03-26
 ; PRIOR APPLICATION NUMBER: 60/079,759
 ; PRIOR FILING DATE: 1998-03-27
 ; PRIOR APPLICATION NUMBER: 60/095,153
 ; PRIOR FILING DATE: 1998-08-03
 ; NUMBER OF SEQ ID NOS: 18
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 4
 ; LENGTH: 1437
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-09-647-140A-4

Query Match 99.8%; Score 7293; DB 5; Length 1437;
 Best Local Similarity 99.8%; Pred. No. 0;
 Matches 1434; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY	1	MKIDIGKEYIIPGSRVRETRSTSGTRHREDSKFRRTTRPLECODALETARAGLS	60
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Db 1 MDIDIGKEYIIPSGYRSVRETSSTGTHRDREDSKFRTRPLBECODALETAAREGLS 60
Qy 61 LDASHMSQRLIIDEHPKRGKHHGSLALPKIRTTCKHOHPVDNAGLFSCWTFMSLSLAR 120
Db 61 LDASHMSQRLIIDEHPKRGKHHGSLALPKIRTTCKHOHPVDNAGLFSCWTFMSLSLAR 120
Qy 121 VAHKKGELSMEDVWSLSKHESSDVNCRRLERLMOEELNEVGPDAASLRVVMJFCRTRL 180
Db 121 VAHKKGELSMEDVWSLSKHESSDVNCRRLERLMOEELNEVGPDAASLRVVMJFCRTRL 180
Qy 181 LSIYCLMTIOLAGFSGPAPVNHLEYYTOATESNLQYSLLVGLLGLTEIVRSMSLATW 240
Db 181 LSIYCLMTIOLAGFSGPAPVNHLEYYTOATESNLQYSLLVGLLGLTEIVRSMSLATW 240
Qy 241 ALNRYTVRLRGAIIITMAFKKILKLNKEKSLGELINICSDNGQMFEEAAVAGSLLAG 300
Db 241 ALNRYTVRLRGAIIITMAFKKILKLNKEKSLGELINICSDNGQMFEEAAVAGSLLAG 300
Qy 301 PVVALIGMTIYNYIILGPTGFLGSAVFILFYPAAMFASRLTAFFRRKCVATDERVOKME 360
Db 301 PVVALIGMTIYNYIILGPTGFLGSAVFILFYPAAMFASRLTAFFRRKCVATDERVOKME 360
Qy 361 VLTYYIKFKIMYAMVKAFAFSQVOKIREERRILEKAGYFOSITVGAIVVIAVVSFV 420
Db 361 VLTYYIKFKIMYAMVKAFAFSQVOKIREERRILEKAGYFOSITVGAIVVIAVVSFV 420
Qy 421 HHTLGFDLTAQAQFVYVYFNFSMTFALKTPPSVKSLSASAVADRFKSLFMEEVHMK 480
Db 421 HHTLGFDLTAQAQFVYVYFNFSMTFALKTPPSVKSLSASAVADRFKSLFMEEVHMK 480
Qy 481 NKRPASPHIKIEKNKNTIANDSSHSIONSPLTPPKMKKRAKRSRCKEYVROLORTHOA 540
Db 481 NKRPASPHIKIEKNKNTIANDSSHSIONSPLTPPKMKKRAKRSRCKEYVROLORTHOA 540
Qy 541 VLAEOGHLLDSDERPSPSEEEKHILGHRLQORTLSIDLEIOEGKLVIGCSVGS 600
Db 541 VLAEOGHLLDSDERPSPSEEEKHILGHRLQORTLSIDLEIOEGKLVIGCSVGS 600
Qy 601 KTSLSAIIIGOMTLEGSIAISGTAYVAQOAMILNATLRDNLFEKEDEERYNSVLNS 660
Db 601 KTSLSAIIIGOMTLEGSIAISGTAYVAQOAMILNATLRDNLFEKEDEERYNSVLNS 660
Qy 661 CCLRPDLALPSSDLEIERGANSOGORISLARALYSRSTIYLLDDPLSALDAHVG 720
Db 661 CCLRPDLALPSSDLEIERGANSOGORISLARALYSRSTIYLLDDPLSALDAHVG 720
Qy 721 NHIFNSAIRKHLKSKTVLFVTHOLOLYVDCDEVIFMKECGCTERGTHEELMNLNGDYAT 780
Db 721 NHIFNSAIRKHLKSKTVLFVTHOLOLYVDCDEVIFMKECGCTERGTHEELMNLNGDYAT 780
Qy 781 FNNLLGEPPEVINSKKTSGSOKKSODKGPRTGSIKKEKAVKPEEGOLVOLEEGGGS 840
Db 781 FNNLLGEPPEVINSKKTSGSOKKSODKGPRTGSIKKEKAVKPEEGOLVOLEEGGGS 840
Qy 841 VMSVYGVYIOAAGPLAVLIMLFMLVNGSTASTMWSWIKGSGNTVTRGENS 900
Db 841 VMSVYGVYIOAAGPLAVLIMLFMLVNGSTASTMWSWIKGSGNTVTRGENS 900
Qy 901 VSDSKNDNPHMOYASIVASMAVMLILKAIKGVVFKTGLASSSLHDELFRILSRSM 960
Db 901 VSDSKNDNPHMOYASIVASMAVMLILKAIKGVVFKTGLASSSLHDELFRILSRSM 960
Qy 961 KFFDTPPTGRIINRFSSKMDDEVRLPFOAEMFIQNVILVFPCVGIACVFPWFVAVGP 1020
Db 961 KFFDTPPTGRIINRFSSKMDDEVRLPFOAEMFIQNVILVFPCVGIACVFPWFVAVGP 1020
Qy 1021 LVTLVSVLIHVSRLIRELKRDNITOSPFLSHITSSIOGLATIBAYNGOEELHAYOEL 1080
Db 1021 LVTLVSVLIHVSRLIRELKRDNITOSPFLSHITSSIOGLATIBAYNGOEELHAYOEL 1080
Qy 1081 LDNDQAPFELFTCAMRWLAVRDLISALITTTGLMIVLMHGOIPPAVAGLAISYAVOLT 1140

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Db 1081 LDNDQAPFELFTCAMRWLAVRDLISALITTTGLMIVLMHGOIPPAVAGLAISYAVOLT 1140
Qy 1141 GLFOFTVRLASERAEFTSVERTNHITKLSLEAPARIKNKASPDWPOGEVTEFNAEK 1200
Db 1141 GLFOFTVRLASERAEFTSVERTNHITKLSLEAPARIKNKASPDWPOGEVTEFNAEK 1200
Qy 1201 RYRENPLVUKKVSFTIKRKEKIGIVGRSGSSIGMALFRLVEISGCICKIDGRISD 1260
Db 1201 RYRENPLVUKKVSFTIKRKEKIGIVGRSGSSIGMALFRLVEISGCICKIDGRISD 1260
Qy 1261 IGLADRSKLSIIPQBPVLFSGTVRSNLDPEFNOYEDQIWDALERTHMECIALDPLKLE 1320
Db 1261 IGLADRSKLSIIPQBPVLFSGTVRSNLDPEFNOYEDQIWDALERTHMECIALDPLKLE 1320
Qy 1321 SEVMENGDNFSVEGROLLCIARALLHCKILLIDEATAANDPTEDLIOETIEAFADCT 1380
Db 1321 SEVMENGDNFSVEGROLLCIARALLHCKILLIDEATAANDPTEDLIOETIEAFADCT 1380
Qy 1381 MULTIAHRLHTVLGSDRIMVLAQGOVEFDPVSVLNSDSRFYAMFAAENKVAVG 1437
Db 1381 MULTIAHRLHTVLGSDRIMVLAQGOVEFDPVSVLNSDSRFYAMFAAENKVAVG 1437

```

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RESULT 3
US-10-154-452-2
; Sequence 2, Application US/10154452
; GENERAL INFORMATION:
; APPLICANT: Reiner, Peter B.
; APPLICANT: Roy, Josee
; TITLE OF INVENTION: INCREASED FUNCTIONAL ACTIVITY AND/OR
; TITLE OF INVENTION: EXPRESSION OF ABC TRANSPORTERS PROTECTS AGAINST THE LOSS OF
; TITLE OF INVENTION: DOPAMINE NEURONS ASSOCIATED WITH PARKINSON'S DISEASE
; FILE REFERENCE: 100103.420
; CURRENT APPLICATION NUMBER: US/10/154.452
; CURRENT FILING DATE: 2002-05-22
; NUMBER OF SEQ ID NOS: 9
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 1437
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-154-452-2

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Query Match          99.8%; Score 7293; DB 6; Length 1437;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 1434; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

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Qy 1 MDIDIGKEYIIPSGYRSVRETSSTGTHRDREDSKFRTRPLBECODALETAAREGLS 60
Db 1 MDIDIGKEYIIPSGYRSVRETSSTGTHRDREDSKFRTRPLBECODALETAAREGLS 60
Qy 61 LDASHMSQRLIIDEHPKRGKHHGSLALPKIRTTCKHOHPVDNAGLFSCWTFMSLSLAR 120
Db 61 LDASHMSQRLIIDEHPKRGKHHGSLALPKIRTTCKHOHPVDNAGLFSCWTFMSLSLAR 120
Qy 121 VAHKKGELSMEDVWSLSKHESSDVNCRRLERLMOEELNEVGPDAASLRVVMJFCRTRL 180
Db 121 VAHKKGELSMEDVWSLSKHESSDVNCRRLERLMOEELNEVGPDAASLRVVMJFCRTRL 180
Qy 181 LSIYCLMTIOLAGFSGPAPVNHLEYYTOATESNLQYSLLVGLLGLTEIVRSMSLATW 240
Db 181 LSIYCLMTIOLAGFSGPAPVNHLEYYTOATESNLQYSLLVGLLGLTEIVRSMSLATW 240
Qy 241 ALNRYTVRLRGAIIITMAFKKILKLNKEKSLGELINICSDNGQMFEEAAVAGSLLAG 300
Db 241 ALNRYTVRLRGAIIITMAFKKILKLNKEKSLGELINICSDNGQMFEEAAVAGSLLAG 300
Qy 301 PVVALIGMTIYNYIILGPTGFLGSAVFILFYPAAMFASRLTAFFRRKCVATDERVOKME 360
Db 301 PVVALIGMTIYNYIILGPTGFLGSAVFILFYPAAMFASRLTAFFRRKCVATDERVOKME 360

```

[illegible]

```

RESULT 4
US-60-389-987-563
: Sequence 563, Application US/60389987
: GENERAL INFORMATION:
: APPLICANT: Ghosh, Soumitra S.
: APPLICANT: Fany, Eoin D.
: APPLICANT: Zhang, Bing
: APPLICANT: Gibson, Bradford W.
: APPLICANT: Taylor, Steven W.
: APPLICANT: Glenn, Gary M.
: APPLICANT: Warnock, Dale E.
: TITLE OF INVENTION: TARGETS FOR THERAPEUTIC INTERVENTION
: TITLE OF INVENTION: IDENTIFIED IN THE MITOCHONDRIAL PROTEOME
: FILE REFERENCE: 660088.465P2
: CURRENT APPLICATION NUMBER: US/60/389,987
: CURRENT FILING DATE: 2002-06-17
: NUMBER OF SEQ ID NOS: 3025
: SOFTWARE: FastSeq for Windows Version 4.0
: SEQ ID NO 563
: LENGTH: 1437
: TYPE: prt
: ORGANISM: Homo sapiens
US-60-389-987-563

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	Query Match	Local Similarity	99.7%	Score 7285	DB 7	Length 1437	
	Matches 1433	Conservative	1	Mismatches	3	Indels	0
QY	1	MKDDIDIGEYII	PSFGYSVNERISTSGTHRDREDSKFRRTAPLBCQDALETPAAREGIS	60			
Db	1	MKDDIDIGEYII	PSFGYSVNERISTSGTHRDREDSKFRRTAPLBCQDALETPAAREGIS	60			
QY	61	LDASHSOLRI	DEHPHGKYHHGSLAKPIPTTCKHQPVPVNAGLSCMTFSWLSLAR	120			
Db	61	LDASHSOLRI	DEHPHGKYHHGSLAKPIPTTCKHQPVPVNAGLSCMTFSWLSLAR	120			
QY	121	VAHKKGELSMEDVWSLS	KHSSSDVNCRLERLMOEELNEVGDAASLRVWVIFCTRLI	180			
Db	121	VAHKKGELSMEDVWSLS	KHSSSDVNCRLERLMOEELNEVGDAASLRVWVIFCTRLI	180			
QY	181	LSIYCLMTITOLAGFSGP	FMVFKHLELYQATSNIOYSLLVGLITLTIYVSWSLATW	240			
Db	181	LSIYCLMTITOLAGFSGP	FMVFKHLELYQATSNIOYSLLVGLITLTIYVSWSLATW	240			
QY	241	ALNRYTGYRLRGAII	LTMAFFKLLTKLNKIKESIGELINICNSDQGMFEPAAVGSLLAG	300			
Db	241	ALNRYTGYRLRGAII	LTMAFFKLLTKLNKIKESIGELINICNSDQGMFEPAAVGSLLAG	300			
QY	301	PVVALIGMTIYNNII	IGPFGFLGSANFIIFYPAMMPASRLTAFFRRCAVNAATERVQKME	360			
Db	301	PVVALIGMTIYNNII	IGPFGFLGSANFIIFYPAMMPASRLTAFFRRCAVNAATERVQKME	360			
QY	361	VLTYYIKFLKMTAWMA	KAFSOSVQKIREEERILLIEKAGYFQSIIVGAVPIVVIVIASVTFESV	420			
Db	361	VLTYYIKFLKMTAWMA	KAFSOSVQKIREEERILLIEKAGYFQSIIVGAVPIVVIVIASVTFESV	420			
QY	421	HMTLGFEDTLTAOA	FIIVVYVFNSTALKYTPPSVKSLSASVAVDRFKSLFMEEYHMK	480			
Db	421	HMTLGFEDTLTAOA	FIIVVYVFNSTALKYTPPSVKSLSASVAVDRFKSLFMEEYHMK	480			
QY	481	NKPASPHIKIEK	NATLWMDSSHSSTIONSPKLTPPMKKOKRASRGKKEVROLQRTHEHA	540			
Db	481	NKPASPHIKIEK	NATLWMDSSHSSTIONSPKLTPPMKKOKRASRGKKEVROLQRTHEHA	540			
QY	541	VLAEOKGHLILDSD	RPSPBEEEGKHILHGLRLQRTLHSIDLEIOEGKLVGICGSVSG	600			
Db	541	VLAEOKGHLILDSD	RPSPBEEEGKHILHGLRLQRTLHSIDLEIOEGKLVGICGSVSG	600			
QY	601	KTSLISALIGMT	LEGSIAISGTAAYVAAQOAMINATIRDNILRGKEVDERYNVNLS	660			
Db	601	KTSLISALIGMT	LEGSIAISGTAAYVAAQOAMINATIRDNILRGKEVDERYNVNLS	660			

661 CCLRPDLALIPSSDLTEIGERGANLSGGORISLARALYSDBRSIYLLDPLSALDAHV 720
661 CCLRPDLALIPSSDLTEIGERGANLSGGORISLARALYSDBRSIYLLDPLSALDAHV 720
721 NHFNSAIRKHLKSKTVLFTVHOLOLVDCDEVIFPKKSGCITRGHHEELMNGDYATI 780
721 NHFNSAIRKHLKSKTVLFTVHOLOLVDCDEVIFPKKSGCITRGHHEELMNGDYATI 780
781 FNNLLGEPPEVEINSKKETSQSKSODKGPRTGSIKKKAAYKPEEGOLVOLEEKGGS 840
781 FNNLLGEPPEVEINSKKETSQSKSODKGPRTGSIKKKAAYKPEEGOLVOLEEKGGS 840
841 VPMSSVGVYIOAAGGFLAFVIALFMLNNGSTAFSTWMLSYWIKOGSGNTYTRGNETS 900
841 VPMSSVGVYIOAAGGFLAFVIALFMLNNGSTAFSTWMLSYWIKOGSGNTYTRGNETS 900
901 VSDSMKDNPHMOYASIVALSMAVMLILKAIKRGVFEVKGTLRASSRLHDELFRILRSPM 960
901 VSDSMKDNPHMOYASIVALSMAVMLILKAIKRGVFEVKGTLRASSRLHDELFRILRSPM 960
961 KFFDTPTRGILNRFKSKDMDVDVRLPFOAEMFIQNVILVFCVGMAGVPMFLVAVGP 1020
961 KFFDTPTRGILNRFKSKDMDVDVRLPFOAEMFIQNVILVFCVGMAGVPMFLVAVGP 1020
1021 LVILFVSLHIVSRVILREKRLDNTIOSPPLSHITSIOGLATIHYNKGOEFLHRYOEL 1080
1021 LVILFVSLHIVSRVILREKRLDNTIOSPPLSHITSIOGLATIHYNKGOEFLHRYOEL 1080
1081 LDNDQAPFELFCAMRWLAVRLDLISALITTTGLMIVLMHGOIPPAVAGLAISYAVOLT 1140
1081 LDNDQAPFELFCAMRWLAVRLDLISALITTTGLMIVLMHGOIPPAVAGLAISYAVOLT 1140
1141 GLFOFVRLASFEARFTSEVERINHIKTLSEAPARIKKNAPSPMPDEGEVTERAEM 1200
1141 GLFOFVRLASFEARFTSEVERINHIKTLSEAPARIKKNAPSPMPDEGEVTERAEM 1200
1201 RRRENPLVLKRYFTIKREKIGIVRTGSGKSSIGMALFRLVELSGGCIKIDGRISD 1260
1201 RRRENPLVLKRYFTIKREKIGIVRTGSGKSSIGMALFRLVELSGGCIKIDGRISD 1260
1261 IGLADLRKSLIIPQEPVLFSGTVRSNLDLPFNQYTEDQIMDALERTHMKCIAQLPLE 1320
1261 IGLADLRKSLIIPQEPVLFSGTVRSNLDLPFNQYTEDQIMDALERTHMKCIAQLPLE 1320
1321 SEWMGNDPFSVGEROLLCIARALLRHCKILLIDEATAAMDPTDILIOETIREAFADCT 1380
1321 SEWMGNDPFSVGEROLLCIARALLRHCKILLIDEATAAMDPTDILIOETIREAFADCT 1380
1381 MNTIAHRLATVIGSDRINVLAAOGVVEFPTPSVLLSNDSSREYAMFPAAEKNKVAVG 1437
1381 MNTIAHRLATVIGSDRINVLAAOGVVEFPTPSVLLSNDSSREYAMFPAAEKNKVAVG 1437

RESULT
US-10-154-452-6
Sequence 6, Application US/10154452
GENERAL INFORMATION:
APPLICANT: Reiner, Peter B.
APPLICANT: Roy, Josee
TITLE OF INVENTION: INCREASED FUNCTIONAL ACTIVITY AND/OR
TITLE OF INVENTION: EXPRESSION OF ABC TRANSPORTERS PROTECTS AGAINST THE LOSS OF
TITLE OF INVENTION: DOPAMINE NEURONS ASSOCIATED WITH PARKINSON'S DISEASE
FILE REFERENCE: 100103.420
CURRENT APPLICATION NUMBER: US/10/154,452
NUMBER OF SEQ ID NOS: 9
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 6
LENGTH: 1325
TYPE: PRT
ORGANISM: Homo sapiens
US-10-154-452-6

Query Match 91.3%; Score 6674; DB 6; Length 1325;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 1309; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
1 MKDIDIGKEYIIPSPGYSVRETSSTGTHRDREDSKFRRTPLDCEODALETAARAGLS 60
1 MEDIDIGKEYIIPSPGYSVRETSSTGTHRDREDSKFRRTPLDCEODALETAARAGLS 60
61 LDASMSQRLILDEEHPKGYHHGLSALKPIRTTCKQHVDNAGLFSCMTFMSLSLAR 120
61 LDASMSQRLILDEEHPKGYHHGLSALKPIRTTCKQHVDNAGLFSCMTFMSLSLAR 120
121 VAHKKGLSMDVDWLSKHESSDVNCRRLERLMOEELNEVGPPAASLRVWVIFCRRRL 180
121 VAHKKGLSMDVDWLSKHESSDVNCRRLERLMOEELNEVGPPAASLRVWVIFCRRRL 180
181 LSTVCLMTITQAGFSGPAFWKHLETTQATESNLQYSLLVGLLLETVRSWLSLTM 240
181 LSTVCLMTITQAGFSGPAFWKHLETTQATESNLQYSLLVGLLLETVRSWLSLTM 240
241 ALMYRTGVRLRGAILTMAFKKILKLNKIKESIGELINICSNDGQRMFEAAVAGSLLAG 300
241 ALMYRTGVRLRGAILTMAFKKILKLNKIKESIGELINICSNDGQRMFEAAVAGSLLAG 300
301 PVVAILGMIYVITLIGTFGLSANVILFYPAMMFASRLTAYRRRCVAAATDERVOKNE 360
301 PVVAILGMIYVITLIGTFGLSANVILFYPAMMFASRLTAYRRRCVAAATDERVOKNE 360
361 VLVIYKFIKMYAWKAFSOSVOKIREERILKAGFOSITGVAPIVVIVASVYFESV 420
361 VLVIYKFIKMYAWKAFSOSVOKIREERILKAGFOSITGVAPIVVIVASVYFESV 420
421 HMTLGEDLTAAQFTVTVYVNSMTFALKVTPFSYKSLSEASVAVDRKSLFMEEVAMIK 480
421 HMTLGEDLTAAQFTVTVYVNSMTFALKVTPFSYKSLSEASVAVDRKSLFMEEVAMIK 480
481 NKPASPIKITEMNATLAMPSSHSIONSPLTPKMKKDRASGKKEKROLORETHQA 540
481 NKPASPIKITEMNATLAMPSSHSIONSPLTPKMKKDRASGKKEKROLORETHQA 540
541 VLAEOKGHLLDSDERSPEEKGKIHGLRLQRTLSIDLEIOBGKLVGICGSVSG 600
541 VLAEOKGHLLDSDERSPEEKGKIHGLRLQRTLSIDLEIOBGKLVGICGSVSG 600
601 KTLISAILGOMTLLEGSIAISCTFAVVAOAMILNATLDRNLLFKGEYDEERYNSVLS 660
601 KTLISAILGOMTLLEGSIAISCTFAVVAOAMILNATLDRNLLFKGEYDEERYNSVLS 660
661 CCLRPDLALIPSSDLTEIGERGANLSGGORISLARALYSDBRSIYLLDPLSALDAHV 720
661 CCLRPDLALIPSSDLTEIGERGANLSGGORISLARALYSDBRSIYLLDPLSALDAHV 720
721 NHFNSAIRKHLKSKTVLFTVHOLOLVDCDEVIFPKKSGCITRGHHEELMNGDYATI 780
721 NHFNSAIRKHLKSKTVLFTVHOLOLVDCDEVIFPKKSGCITRGHHEELMNGDYATI 780
781 FNNLLGEPPEVEINSKKETSQSKSODKGPRTGSIKKKAAYKPEEGOLVOLEEKGGS 840
781 FNNLLGEPPEVEINSKKETSQSKSODKGPRTGSIKKKAAYKPEEGOLVOLEEKGGS 840
841 VPMSSVGVYIOAAGGFLAFVIALFMLNNGSTAFSTWMLSYWIKOGSGNTYTRGNETS 900
841 VPMSSVGVYIOAAGGFLAFVIALFMLNNGSTAFSTWMLSYWIKOGSGNTYTRGNETS 900
901 VSDSMKDNPHMOYASIVALSMAVMLILKAIKRGVFEVKGTLRASSRLHDELFRILRSPM 960
901 VSDSMKDNPHMOYASIVALSMAVMLILKAIKRGVFEVKGTLRASSRLHDELFRILRSPM 960
961 KFFDTPTRGILNRFKSKDMDVDVRLPFOAEMFIQNVILVFCVGMAGVPMFLVAVGP 1020
961 KFFDTPTRGILNRFKSKDMDVDVRLPFOAEMFIQNVILVFCVGMAGVPMFLVAVGP 1020

QY 102L LVILFSLVLIHSRVLRELKRLDNITQSPPLSHITSSIOGLATIHAVNKGQEFLEHRYOEL 1080
DB 102L LVILFSLVLIHSRVLRELKRLDNITQSPPLSHITSSIOGLATIHAVNKGQEFLEHRYOEL 1080
QY 108L LDNOAOPFLEFTCAMRLAVRLDLISALTITTTGMLVLMHGQIPRAYAGLAISYAOULT 1140
DB 108L LDNOAOPFLEFTCAMRLAVRLDLISALTITTTGMLVLMHGQIPRAYAGLAISYAOULT 1140
QY 114L GLFOFVRLASETEARPTVERINHYIKTSLLEAPARIKKASPDPMPQEGEVTEFAEM 1200
DB 114L GLFOFVRLASETEARPTVERINHYIKTSLLEAPARIKKASPDPMPQEGEVTEFAEM 1200
QY 120L RYREBNPLVLYKVSFTIKPREKIGIVGRTSGSGSSIGMALFRVLEISGGCIIKIDGVRISD 1260
DB 120L RYREBNPLVLYKVSFTIKPREKIGIVGRTSGSGSSIGMALFRVLEISGGCIIKIDGVRISD 1260
QY 126L IGLADLRKSIIIPQEPVLESGTVRSNLDPPNOYTEDQIWDALERTHMKECI 1312
DB 126L IGLADLRKSIIIPQEPVLESGTVRSNLDPPNOYTEDQIWDALERTHMKECI 1312

RESULT 6

US-10-087-782A-31
Sequence 31, Application US/10087782A
GENERAL INFORMATION:
APPLICANT: AVENTIS PHARMA SA
APPLICANT: US GOVERNMENT OF THE UNITED STATES
TITLE OF INVENTION: NUCLEIC ACID OF THE HUMAN ABC11 GENE, VECTORS
TITLE OF INVENTION: CONTAINING SUCH NUCLEIC ACID, AND USES THEREOF
FILE REFERENCE: ABC11 GENE
CURRENT APPLICATION NUMBER: US/10/087, 782A
CURRENT FILING DATE: 2002-07-03
PRIOR APPLICATION NUMBER: 60/272,757
PRIOR FILING DATE: 2001-03-05
NUMBER OF SEQ ID NOS: 31
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 31
LENGTH: 1382
TYPE: PRN
ORGANISM: Homo sapiens
US-10-087-782A-31

Query Match 36.4%; Score 2663.5; DB 6; Length 1382;
Best Local Similarity 40.8%; Pred. No. 1.9e-189;
Matches 556; Conservative 258; Mismatches 501; Indels 49; Gaps 8;

QY 77 PKGKYHHGLSALKPRTTCKH--QHPVDNAGLSCMTFWSLSLARVAHKKGELSMEDVW 134
DB 60 PMGKYDAALRTMIPFRKPPRPAPQPLDNAGLSYLTFSWLTPL-MIQSLSRIDENTIP 118
QY 135 SLKHHESDVNCRLEBLEMOEELNEVGPDAASLRVWICRPTLIISYICMTOLAGF 194
DB 119 PLSHHDSDKNVOKLHMLMEEVSRGIEKASVLLVMRFQRTKLIDALGICFCIASV 178
QY 195 SGPAFWKHLLEATQATSNLSLIVGLLLEIYRSALATWALNTKGYRLGAI 254
DB 179 LGLPILILPKLLESEGLNVHVGCLFALFLSECYKSLSFSSSWIINQRTAIRFAAV 238
QY 255 LTMAFKILKLNKIKESLGBELINCSNDGORMEAAVSLAGGPVALIGMIVYTI 314
DB 239 SSPAFELKIOFKSVIHTISESAISFTGDVAVYLEGVCYGLVITCASIVICISSYFI 298
QY 315 LGPTGFLGSANVILFYFAMMFASRLTAYFRKCAATADEROKNEVLYTIKFKTAMV 374
DB 299 IGTAFALICYLILVFLAVFMTMAVKAQHHSVSDQRIKVSSEVLTCKILKMTWE 358
QY 375 KASQSOVKITREBRILKAGYFOSITGVAPIVVIVIASVTFQSHMTLGFDTLTAQAF 434
DB 359 KPPAKITIEDIRKREKLEKCGVQSLSTITLFIIPVATVAVWLHITSLKAKITASNAF 418
QY 435 TVYTVFNSMTFALKVTPFVSLSSEASVAVDRKSLFLMEVHMINKNPASPHIKIEKN 494

DB 419 SMLASMLRLSYFVFIKAVKGLNKSAAWRFKFFLOSPVYVOTLDDPSALVFE 478
QY 495 ATLAMDSHSSIOSPKLTPMKKDKRASRGKKEKVBQLORTEHOAVLAEBQGLHLDSD 554
DB 479 ATLSMOOTCEIYNG-----ALELRNGH-ASEGM 507
QY 555 ERP---SPEEERKHLIHLRLQRLHSIDLEIOBGLVIGCGVSGKTSLSIALG 610
DB 508 TRPDALGPEBEGNS-----LGPETHKINTLVASGMMGLGVCGNGSGKSSLSIALE 559
QY 611 QMTLLEGSIALSGFAVAAQAMLTNLTDRNLFEGKEDEERNVNSLQCLPDLAIL 670
DB 560 EMHLEBSVGQSLAVPQQAMTVSGNIRENIMLGAAYDARLQVHLCCSLRDLLEL 619
QY 671 PSSDLTEIGERGANLSSGQORISLARALYSRDSIYILDDPLSALDAHVGNFNSAIRK 730
DB 620 PFGMTEIGERGLNLSGGQORISLARALYSRDSIYILDDPLSALDAHVGNHFEBCIK 679
QY 731 HLKSTVLFVTHQLOYLVDCEVIFEMKSGCITERGHEELMNLNGDYATIPNNLLGEP 790
DB 680 TLRGKTVVLTHTQYLEFCQIILLENGKICENGTHSELMQKKGKQAOLIOKKHKEATS 739
QY 791 PVLEINSKRTSGSKGSKODKPKTKSGIKKEKAVPEEGOLVQLEKGGSVPMVGVYI 850
DB 740 DMLDDTAKIAKPKRVEQALATLSLEESLNGNAV--PEHOLTOEEMEGSLMKRVYHYI 797
QY 851 QAAQGPALFVIMLFMNVGSTAFSTWMLSYWIKOGSGNTTYRGNETSVS-DSMKDNP 909
DB 798 QAAQGVAVSCIFEFVVLIVELTFISFWMLSYWLEQSGTSSHESNGTMDLGNIDNP 857
QY 910 HMQYASIALSMAVMLLAKIRGVVFKGTLRASSRLHDELFRILRSPKFFEDTPTG 969
DB 858 QLSFYQLYVGNALLILCVGSSGIFFTKVRKASTLHNLFKFKVRCPSFEDTIPIG 917
QY 970 RLNRFSKDNDEVVRLPFOAEMFIQNVILVFCVGMAGVPEVLAAGVPLVILFSLH 1029
DB 918 RLNCFAGDLEQDQLPITSEQFLVSLMVAIVLVSVLPIILMGALIMYICITY 977
QY 1030 IVSRVILRELKRLDNITQSPPLSHITSSIOGLATIHAVNKGQEFLEHRYOELDNQAPF 1089
DB 978 MMEKKAIGVFERLENYRSRPLFSHILNLSIOGLSSIHYGKTEDISQFKRLTDQANNVLL 1037
QY 1090 LFTCAMRLAVRLDLISALTITTTGMLVLMHGQIPRAYAGLAISYAOULTGLFQFVRL 1149
DB 1038 LFLSTRTMALARLIMNLVTLAVALFAFGISSTPYSFKMAVAINVLOLSSFOATARI 1097
QY 1150 ASFTFARTSYERINHYIKTSLLEAPARIKKASPDPMPQEGEVTEFAEMRYREBNPLV 1209
DB 1098 GLETEAFTFAVERILOYKMKCVSEAPLHMEGSTCPQGPQOGEITIFQDYHMKYRDNPV 1157
QY 1210 LKVSFTIKPREKIGIVGRTSGSGSSIGMALFRVLEISGGCIIKIDGVRISDGLADLRSK 1269
DB 1158 LHGINLITRGHEVGVIGRTSGSGSSIGMALFRVLEPAGATILDDVIGSIGLEDLRSK 1217
QY 1270 LSIIPQEPVLESGTVRSNLDPPNOYTEDQIWDALERTHMKECIADLPKLESEVMNGDN 1329
DB 1218 LSVIIPQEPVLESGTVRSNLDPPNOYTEDQIWDALERTHMKECIADLPKLESEVMNGDN 1277
QY 1330 FSVGEROLLCIARALLRCKLILIDEATAANDTETDILLOETIETEARFADCTMLTARHL 1389
DB 1278 FSVGEROLLCIARAVLRNSKIIILIDEATASIDMETDVLIOETIETEARFQCVLVAHRYT 1337
QY 1390 TVLGSDRIMVLAQGVVEFDPFVLSLNDSSRFAMFAAENKV 1433
DB 1338 TVLNCDHILVGNKGVVEFDRPEVLRKPKGSLFAALMATATSSSL 1381

RESULT 7

US-10-162-012-34
Sequence 34, Application US/10162012
GENERAL INFORMATION:
APPLICANT: Curtis, Rory A.J.

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APPLICANT: Silos-Santiago, Immaculada
APPLICANT: Gu, Wei
TITLE OF INVENTION: NOVEL HUMAN ION CHANNEL AND TRANSPORTER FAMILY MEMBERS
FILE REFERENCE: 10448-190001
CURRENT APPLICATION NUMBER: US/10/162.012
PRIOR FILING DATE: 2002-06-04
PRIOR APPLICATION NUMBER: US 60/209,845
PRIOR FILING DATE: 2000-06-06
PRIOR APPLICATION NUMBER: US 09/875,321
PRIOR FILING DATE: 2001-06-06
PRIOR APPLICATION NUMBER: PCT/US01/18340
PRIOR FILING DATE: 2001-06-06
PRIOR APPLICATION NUMBER: US 60/209,257
PRIOR FILING DATE: 2000-06-05
PRIOR APPLICATION NUMBER: US 09/875,423
PRIOR FILING DATE: 2001-06-05
PRIOR APPLICATION NUMBER: PCT/US01/18398
PRIOR FILING DATE: 2001-06-05
PRIOR APPLICATION NUMBER: US 60/209,238
PRIOR FILING DATE: 2000-06-05
PRIOR APPLICATION NUMBER: US 09/875,363
PRIOR FILING DATE: 2001-06-05
PRIOR APPLICATION NUMBER: PCT/US01/18247
PRIOR FILING DATE: 2001-06-05
PRIOR APPLICATION NUMBER: US 60/227,068
PRIOR FILING DATE: 2000-08-22
PRIOR APPLICATION NUMBER: US 09/928,530
PRIOR FILING DATE: 2001-08-13
PRIOR APPLICATION NUMBER: PCT/US01/25475
PRIOR FILING DATE: 2001-08-15
PRIOR APPLICATION NUMBER: US 60/226,770
PRIOR FILING DATE: 2000-08-21
PRIOR APPLICATION NUMBER: US 09/934,421
PRIOR FILING DATE: 2001-08-21
PRIOR APPLICATION NUMBER: PCT/US01/26096
PRIOR FILING DATE: 2001-08-21
PRIOR APPLICATION NUMBER: US 60/279,281
PRIOR FILING DATE: 2001-03-28
PRIOR APPLICATION NUMBER: US 10/109,029
PRIOR FILING DATE: 2002-03-28
PRIOR APPLICATION NUMBER: PCT/US02/09728
PRIOR FILING DATE: 2002-03-28
PRIOR APPLICATION NUMBER: US 60/290,288
PRIOR FILING DATE: 2001-05-11
PRIOR APPLICATION NUMBER: US (not assigned)
PRIOR FILING DATE: 2002-05-13
NUMBER OF SEQ ID NOS: 48
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO: 34
LENGTH: 1360
TYPE: PRT
ORGANISM: Homo sapiens
US-10-162-012-34

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Query Match 34.8% Score 2540.5 DB 6 Length 1360

Best Local Similarity 39.4% Pred. No. 2.8e-180

Match 542 Conservative 251 Mismatches 487 Indels 97 Gaps 11

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OY 7 PKGYNHGLSALRPRTTCKH--OHVYDNGALFSCMTFMSLSTLARYAHKKGELSMEDVW 134
DB 6 PMKDYDALRTMIPFRKPRFPAPQPLDNGALFESYLVSMUTPL--MQSLRSRIDENTIP 118
OY 13 SLKSHSSDVNCRRLLELMQBELNENGPDAASLRVYVWICRRLLIISYCLMTTOLAGF 194
DB 11 PLSVHSAASNVQRLHMLMEVEVSRRGIERKASVLLVWLRFQRTLLIDALGICFCIASV 178
OY 19 SGPAFWKHLLEYTOATESMLQYSLILVGLLLEIYVRSMLATWALNRTGVRLGAI 254
DB 179 LGLILLIKLLEYSEDLGNVHVGICFLFLFSECKYSLSFSSSWIINORTAIRFAAV 238
OY 255 LTMFAKILKLNIKEKSLGELINCSN-----DGRMEFAAAGVSLGAGP 301

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DB 239 SSFAFEKIQFKSVIHTSGEGDICAHLQALQASIFFTGDVNYLFEGVCGPLVLTTC 298
OY 302 VVALGMIYVNIILGPGFLGSAVFLFYPMMAASRLTAFRRKCAATADEROKANEV 361
DB 299 ASLVICISISFYIIGYAFALICVLLVFLAVMTETMAVKAQHHTSEVSQRIATVSEV 358
OY 362 LTYIKFKMYAMVAFSOSVOKIREERRILDEKAGVFOSIYVGAPIVYVIAVYFESVH 421
DB 359 LTCIKLIMTWKEPFKIIEGM-----ESLTFCKP----- 390
OY 422 MTLGFDLLAAQAFVTVVTFNPMFALVTPSPVKSLEASVAYDRFKSLFMEVHMIKN 481
DB 391 -----GDGMAFMSLMSLNLRLSVFVPLAVAGLINSASAVRRFKKFLQESPVYVQ 443
OY 482 KPASPRIKIEKNATLAMDSSHSTONSPLTPPMKKDKRASRKKKRVROLATHEQAV 541
DB 444 TLDPSSKALVEEATVLSMOOTCPGIVNG-----AL 473
OY 542 LABQGHLLDSDERP-----SPREECKHILHGLRLQRTLHSTIDLEIOEKLVIQGSV 597
DB 474 ELERNHG-ASEGMRTPPDALGPEEGNS-----LPELHKINLVSKGMALGVCNT 524
OY 598 GSGKTSLSIALGQMTLLEGSIAISCTFAVYAQAMILNLTNRNILEGKEYDERNSV 657
DB 525 GSGKSSLSIALLEEMHLEGSVGVQSLAVYPOQAWIVSGNIRENIIIMGAYDKARILQV 584
OY 658 LNSCCLRPDLAIIPLSPULTEIGERGANLGGQORISLARLYSDRSYIILDDPLSALDA 717
DB 585 LHCCSLRDELLEPFEGMTTEIGERGLNLSGQOKRISLARVYSDROYIYLLDPLSADVA 644
OY 718 HVGNIHNSAIRKHLKSKTVLEFVTHOLOYLVDCEVIFMKKCGCTTEGTHEELNLDY 777
DB 645 HVGNIHEECIKTKTBRKTVYLVTHOLOYLEFCQIILLENKGCIBENGTSELMOKKGY 704
OY 778 ATFFNNLLGETPPEVINSKKEGSGQKSDQPKGTGSIKKEAVAPPEQOLVLEEGK 837
DB 705 AOLQKHKEATSDMLQDTAKIAEKPVESQALATSEESLNGNAV--PEHQLQEEEME 762
OY 838 QGSVPMSVYGYVTOAGGFLAVLYMALFNLNVSSTAFSTWMLSYVKKQSGNTTVRGN 897
DB 763 EGSLSMRYVHHYIQAGGVNCSLIEFFVYLVEFLTFSEFWLSYMLEQSGTSSRESN 822
OY 898 ETSVS-OSMKDNPIMQYVYASIALSMAMVILKAIKIRGVFEGKGLRASRLDELFRIL 956
DB 823 GTMADLGNIDNPOLSTFYLYGIALNALLICVYSCSSGIFKTVYRKASTALHNLKPVF 882
OY 957 RSPMKFPDTPPTGRILNRFKSKMDDEVRLPEQAMETIQVNIIVFCVGMIAGVPMFLV 1016
DB 883 RCPKSPFDITPIGRILNCFAGDLEQDLPLPFSEQFLVLSLWIAVILVSVLPYLL 942
OY 1017 AVGLVILFVSLHIVSVKVLRELKRLDNITQSPFLSHITSSIOGLATIIHANKQDFLHR 1076
DB 943 MGALINVICFLYMMFKAIGVFERLNSYSPLSHLSLQGLSIHVGKTEDPISQ 1002
OY 1077 YOELLDDNOAPFLFTCAMRLAVRLDISIALITTTGMLVLMHGOIIPRAYAGLAYSIA 1136
DB 1003 FKRLTDQNNYLLFLFSTRMALRLIMTLVTLAVALFARFISSTPSFKMAVNIY 1062
OY 1137 VQUTGLFOFTVRLASETEARTSYERINHYIKTSLDAPARIKKAPSPDMPQGEVTFE 1196
DB 1063 LQLAASSQATARIGLFEADQFAVERILIQYMKMCVSAPLHMEGTSCPOGPGHEILFQ 1122
OY 1197 NAKMRYRENLPYLVAKVSFTIKPREKIGIVGRGSSGSSIGMALFRLVELSGCICIKIDV 1256
DB 1123 DYHKKYRDNPTVYLGINTLRGHEVYIVGRGSSGSSIGMALFRLVEPAGGILIDGV 1182
OY 1257 RISDIGLADRSKLSIIPQEVLESGTVRSNULDFENQYTEDQINDALEPRTMKSCIALP 1316
DB 1183 DIGSIGEDLRKSLSVTPQDPVLLSGTIRRLNDFPDHHTDOQINDALEPRTFAISKFP 1242
OY 1317 LKLESEVMGNDNESVGEROLLCTARALLRCKTILIDEATVAADTETDLLIOETIRAP 1376
DB 1243 KILHTDVENGNSVGEROLLCTARAVLRNSKIILIDEATVASTIDMETDILQGTIREAF 1302

```

Query Match 28.0% Score 2049.5; DB 5; Length 1325;
Best Local Similarity 35.4%; Pred. No. 1.2e-113;
Matches 489; Conservative 254; Mismatches 466; Indels 171; Gaps 33;

US-09-6471140A-2
Sequence 2, Application US/096471140A
GENERAL INFORMATION:
APPLICANT: Fox Chase Cancer Center
APPLICANT: Kruh, Gary D.
APPLICANT: Lee, Kun
APPLICANT: Belinsky, Martin G.
APPLICANT: Bain, Lisa J.
TITLE OF INVENTION: MRP-Related ABC Transporter Encoding
TITLE OF INVENTION: Nucleic Acids and Methods of Use Thereof
FILE REFERENCE: F000 98-02
CURRENT APPLICATION NUMBER: US/09/647,1140A
CURRENT FILING DATE: 2001-05-21
PRIOR APPLICATION NUMBER: PCT/US99/06644
PRIOR FILING DATE: 1999-03-26
PRIOR APPLICATION NUMBER: 60/079,759
PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/095,153
PRIOR FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 18
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 2
LENGTH: 1325
TYPE: PRT
ORGANISM: Homo sapiens
US-09-6471140A-2

Query Match 28.0% Score 2049.5; DB 5; Length 1325;
Best Local Similarity 35.4%; Pred. No. 1.2e-113;
Matches 489; Conservative 254; Mismatches 466; Indels 171; Gaps 33;

US-09-6471140A-2
Sequence 2, Application US/096471140A
GENERAL INFORMATION:
APPLICANT: Fox Chase Cancer Center
APPLICANT: Kruh, Gary D.
APPLICANT: Lee, Kun
APPLICANT: Belinsky, Martin G.
APPLICANT: Bain, Lisa J.
TITLE OF INVENTION: MRP-Related ABC Transporter Encoding
TITLE OF INVENTION: Nucleic Acids and Methods of Use Thereof
FILE REFERENCE: F000 98-02
CURRENT APPLICATION NUMBER: US/09/647,1140A
CURRENT FILING DATE: 2001-05-21
PRIOR APPLICATION NUMBER: PCT/US99/06644
PRIOR FILING DATE: 1999-03-26
PRIOR APPLICATION NUMBER: 60/079,759
PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/095,153
PRIOR FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 18
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 2
LENGTH: 1325
TYPE: PRT
ORGANISM: Homo sapiens
US-09-6471140A-2

US-09-6471140A-2
Sequence 2, Application US/096471140A
GENERAL INFORMATION:
APPLICANT: Fox Chase Cancer Center
APPLICANT: Kruh, Gary D.
APPLICANT: Lee, Kun
APPLICANT: Belinsky, Martin G.
APPLICANT: Bain, Lisa J.
TITLE OF INVENTION: MRP-Related ABC Transporter Encoding
TITLE OF INVENTION: Nucleic Acids and Methods of Use Thereof
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CURRENT APPLICATION NUMBER: US/09/647,1140A
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PRIOR APPLICATION NUMBER: PCT/US99/06644
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PRIOR APPLICATION NUMBER: 60/079,759
PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/095,153
PRIOR FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 18
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 2
LENGTH: 1325
TYPE: PRT
ORGANISM: Homo sapiens
US-09-6471140A-2

US-09-6471140A-2
Sequence 2, Application US/096471140A
GENERAL INFORMATION:
APPLICANT: Fox Chase Cancer Center
APPLICANT: Kruh, Gary D.
APPLICANT: Lee, Kun
APPLICANT: Belinsky, Martin G.
APPLICANT: Bain, Lisa J.
TITLE OF INVENTION: MRP-Related ABC Transporter Encoding
TITLE OF INVENTION: Nucleic Acids and Methods of Use Thereof
FILE REFERENCE: F000 98-02
CURRENT APPLICATION NUMBER: US/09/647,1140A
CURRENT FILING DATE: 2001-05-21
PRIOR APPLICATION NUMBER: PCT/US99/06644
PRIOR FILING DATE: 1999-03-26
PRIOR APPLICATION NUMBER: 60/079,759
PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/095,153
PRIOR FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 18
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 2
LENGTH: 1325
TYPE: PRT
ORGANISM: Homo sapiens
US-09-6471140A-2

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? CURRENT APPLICATION NUMBER: US/60/389,987
? CURRENT FILING DATE: 2002-06-17
? NUMBER OF SEQ ID NOS: 3025
? SOFTWARE: FastSeq for Windows Version 4.0.0
? SEQ ID NO 1718
? LENGTH: 1368
? TYPE: PRT
? ORGANISM: Homo sapiens
US-60-389-987-1718

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Query Match	27.8%;	Score 2034.5;	DB 7;	Length 1388;
Best Local Similarity	34.3%;	Pred. NO. 1.6e-142;		
Matches	480;	Conservative 259;	Mismatches 471;	Indels 189; Gaps 21

Dd	85	ISLAKPRITTC	KHOPDNMGLFSCMFE	SWMLSLARVAHKH	KGELSMEDWLS	SHESSDV	144																					
QY	92	MTALK	-----	ENCPRESSAS	FLSRITFFW	WTIGLI	VRGYRQPLEGSDMSLNKEDTSEQ	144																				
QY	145	NCRRLER	MOBELNEV	-----	GPDA	-----	S	166																				
Dd	145	VVPVLV	KMKKCEKATRKQ	PVKVYVSS	KDRPAQPKRESSK	VDANEVEALYK	SPQKEMNPS	204																				
QY	167	LRRVW	IECFRRLILSTYCLM	ITOLAGS	GFAGFVVKH	LELTQAT	TEENLOYSLTVGL	226																				
Dd	205	LFKVL	YTFGFFLMSFPFRA	INDLMFSGQ	-ILKLILK	VNDTKAPDMO	GYTYVLLF	266																				
QY	227	LTEI	VSMSLALWALNYR	FGVRLGAL	ILTMAFKIL	KLKNIKERS	-LGLINICSDG	284																				
Dd	264	VTACLO	TLVHLQYHIFCVS	GMRIKTAVIG	AVYRKALVITNS	ARKSSGVEI	VILMSVDA	322																				
QY	285	ORMEE	AAVSGSLLAGGV	VAALIG	IVAVIILG	PGFGLS	AVFILFYR	344																				
Dd	324	QREMD	LTYIMMISAP	LOYLALYLMLN	IGPSVLG	AVMVLV	NAVMARKTITYQ	383																				
QY	345	RKCYA	ATDERVOKNEV	LYTIKFI	KYAWKAF	SQSYOKI	IEEERRIL	EKAGYFOSITVG	404																			
Dd	384	VAHK	SKDNRIKLNELL	INGIKVLK	YAMELAF	DFDKVLA	IQOELK	YUKKSATYLSNGTF	444																			
QY	405	VAP	TVVYIASVYVTS	YMHMGLFD	-LRAAQ	FVYVYVNS	KTFPLKATP	PPSVKSLASAV	466																			
Dd	444	TWVCT	PELVALCTFA	VYVYVYV	IDENNID	AOAFVSLAF	ENILRPLN	ILPMVSISSIVASV	503																			
QY	463	AVDRF	SLFLEEVH	-MIKKPASP	---HIKIM	KANTLAMD	SHSSIONS	PRLPPLPKM	517																			
Dd	504	SILK	RLRFLSHEEL	EPDSIER	RRPKDGG	INSTR	NAITFW	-----	545																			
QY	518	KDRAS	SGKKEKV	QLORTE	HQAVLA	EOKGHLL	DSDEPSP	PEEERKNIHLHLRLORT	577																			
Dd	546	-----	-----	-----	ARSDP	-----	-----	T	552																			
QY	578	LHSID	LEQBEK	LIGIGSV	SGSKTSL	LSALIG	MTLEBS	LSISGF	FAYVAAQAMLNA	633																		
Dd	553	LNGTF	SIPBEAL	AAVVGVC	CGKSSLS	LALMA	EDVEGH	VALKGS	AAVYPOAOAMOND	612																		
QY	638	TLRINI	IFGKEY	DEERYNS	YNSCCL	RPDLAL	IPSSOLT	TEIGER	GAMVSGGORISLAR	697																		
Dd	613	SLRNI	LEFGOL	DEERYR	SVYIQ	ACALLP	DEILEIP	SGRTEL	GEIGCVMLSGGOKORVSLAR	672																		
QY	698	ALISDR	SIYILDDP	LSALDA	HVGNH	IFNSAI	-RKHLK	SKTVLE	FTVTHOLOYLVD	755																		
Dd	673	AVYEN	ADYI	LEDDP	LSAVDA	HVGNH	IFENYV	IGRPG	MLKNKTRILIVTHSM	733																		
QY	756	MKEC	ITER	GHEHELM	INDGY	AIIF	-----	NNL	784																			
Dd	733	MSGK	SIDEM	SGYOELL	LRDGA	FAFE	LRTYAST	BEOD	AEENG	VYGVSGPEKA	OMENGM	792																
QY	785	LL	-----	GETP	VEL	INSK	RETS	SGSKS	QODG	PKTG	SIKKEA	VPEEG	QVOL	LEEK	QSGS	840												
Dd	793	LVTDS	ACKO	LO	RO	LS	SSSS	YS	GDIS	SRHN	---STAE	LO	KNA	KEE	ET	YWKLM	END	ADK	AO	TQ	849							
QY	841	VPM	SVY	GVY	IO	AG	PL	AF	LY	AL	ML	YN	GS	TA	EST	WM	LS	Y	W	I	K	GS	GN	TV	Y	RG	NETS	900

Db 850 VKLSVDMYDKAIGLFISPLSTIF-LPMCHHVSALSNWLSLMTDDPLVNC---QZHTK 905

QY 901 VSDSMKDNPMQOYASTAYALSMAVWLILKAIINGVVFVKGTLRASSRLHDELFRRLNSPM 960

Db 906 VRLSVYGCALISOGIAIVFGYSMAVSI-----GGILASRCLHYVDLHSLTRNSPM 953

QY 961 KPRPTPTGRLIREKSDKDEVDVNRILPQAEPIQIWLIVFEVCMIAGVPPWFLVANGP 1020

Db 954 SEFRPTSPGNLVNRFSEKDELDTQDSMLPEVIKMFMSLFEVNGACIVILLATPIAIIIPP 1013

QY 1021 LVILFSLVLIHVSRLI---RELKRLNITQSPFLSHITSSIOGLTAIYANKGOEFLHRY 1077

Db 1014 LGLIY---FVQOIFYAASSQOLKRLSEVSRSYPYSHFNETLIGSVITAFEEQOERFIHQ5 1070

QY 1078 QELLDDNQAPFLFTGCAMRLAVRLDLISALITTTGMLVLMHQIIPRAYAGLAISYAV 1137

Db 1071 DLKVDENQKAYPSYIAVNRMLAVRLCEVNCNIVLFAALFAVISRHSLSAGLVSVSYSL 1130

QY 1138 QLTGLOFYTRLASFEIARTSYERLNHITKLISLEAPARIKNKAPSPDMQOGEVYFEN 1197

Db 1131 QVTTYTLMLVLRMSSEMETNIVAVERLKEVSET-EKEAPMOIQETAPSPSMQOVGRVERFN 1189

QY 1198 AEMRYRENPLVLYKVSFTIKPREKIGIYGRFGSGSSIGMALPFLVLESQGCRIQDVR 1257

Db 1190 YCLNTRRDDLPVLRHNVTINGEKKYIGRTGAGSSLTLLGFRINESAGEEIIIDISN 1249

QY 1258 ISDGLADLRDSKLSIIPQEVPLFSGTVSRNLDLPFNQYTEDQIWDALERTHKKECIAQLPL 1317

Db 1250 IAKTGLHDLRFKTTIIPQDVLFSSGLSRNNLDLPFGQYSDEEVMWISLHLAKDKPVSALPD 1309

QY 1318 KLESEVMENGDNFSVGEROLLCTARALLRHCKLILIDEATAAMDTEDDLIOETIRREAF 1377

Db 1310 KLDHECGEGEGENSTVGOROLVCIARALLRKTKILVLDDEATAVDALETDLLIOSTRTOFE 1369

QY 1378 DCTMLTTRAHRLHVTVLSGR 1396

Db 1370 DCTVYLTTRAHRLNFTIMQYTR 1388

RESULT 10
US-09-935-625-26957
Sequence 26957, Application US/09935625

TITLE OF INVENTION: POLYNUCLEOTIDES, POLYPEPTIDES, CELLS, AND METHODS THEREOF CAPABLE OF
 TITLE OF INVENTION: MODULATING VARIOUS RESPONSES
 FILE REFERENCE: 2750-1481P
 CURRENT APPLICATION NUMBER: US/09/935, 625
 CURRENT FILING DATE: 2001-08-24
 NUMBER OF SEQ ID NOS: 33136

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? LENGTH: 1510
? TYPE: PRT
? ORGANISM: Arabidopsis thaliana
? FEATURE:
? NAME/KEY: peptide
? LOCATION: 1..1510
? OTHER INFORMATION: Ceres Seq. ID no. 3447801
? OS-09-935-625-26957

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Query Match	27.7%;	Score 2023.5;	DB 5;	Length 1510;
Best Local Similarity	34.4%;	Pred. No. 1.2e-141;		
Matches 478;	Conservative 239;	Mismatches 500;	Indels 171;	Gaps 21;

[illegible]

QY 194 -----FSGPAMVKKHLEETOATES---NLQYSLVLGLLLEIVRSW 234
 Db 189 RFWMGFGWKIGNDCSQVGP--LLINELLSKMQNEPAMIGIYIAISFVGVLGCE-- 245
 QY 235 SLALTMALNRTGVRGLGAILTMAFKIILKIKNIKESL--GELINICSDGOMFPA 292
 Db 246 --AQYONVAMVGRVRLRSALIAAVFRKSLRLTEGRRKFPQTKITNMTDAESLQICQ 303
 QY 293 VGSLLAGPVAVALIGMIYVILGPGFGLGSAVFILFYPPAMFASRLTAVFRRCVATD 352
 Db 304 SLHTMSAPRIIVAILVILYQQLGVAIIIGALFLVLMFPIQIOTVIISKTOKLTKEGLQRTD 363
 QY 353 ERVQKNEVLTITKIKMAYAVKAFSOSVOKIREERRIIEKAGYFOSTIVGAPIVVI 412
 Db 364 KRIGLNEVLAAMDYKVCYAMENSFOSKYQTVRDEDELSPFRKQQLSAPFMFLINSIPVL 423
 QY 413 ASVTFESVHMTLGDLTAAQAFIVYVNSMTFALKVTPSPVSKLSASVAVDRFKSLFL 472
 Db 424 VTVVSFVFSVLGGLDLPAPAFITSLFSVLRPLFLPFLPITITOMVANVSLNLEEVLS 483
 QY 473 MEVHMINKNPASP-HIKIEMKNTLAMDSSSHSSIONSPLKTPRKMKDKRASRGKKEVR 531
 Db 484 TEERVLLPNPIEPGPALISIRNGYFSWDS----- 513
 QY 532 QLORTEHQAVALAQKGLHLLDSDEPSPREEBKHHHLRLQRTLHSDLEIOEGKLV 591
 Db 514 -----KADRP-----TNSINILDIPLGSLV 533
 QY 592 GIGSGVSGKTSLSAIIIGOM--TLBEGSIAISGFAYVAAQVAMTLNDNLIFGKED 650
 Db 534 AAVSGTGEKTSLSAIIIGOM--TLBEGSIAISGFAYVAAQVAMTLNDNLIFGKED 593
 QY 651 EERYNSVLSNCLRPDLAIPSSDLTEIGRGANLISGQORISIALALYSDBRSIYLLD 710
 Db 594 QEKYERTYDTALQHEDELLPGDLPLEIGRGVYNSISGQORVSAVYVNSNVCILDD 653
 QY 711 PLSALDAHVGNHIFNSAIRKHLKSKTYLVYTHOLOLYVDCDEVIEMEGCITERGHEEL 770
 Db 654 PLSALDAHVGOQVFEKIKRELQOTTRVLVTLNQLHFLSQYDKILVBEQVKEGTYEEL 713
 QY 771 MNNGDVAITFNLT-----LIGEPVPEINSKRETSQSKSOKKSGKGTGIRKEKA 822
 Db 714 CHSGPLFORLMEKAGVEDYSENGEAEVDQTSYKPEVENCNANNLQDGIETKNSKGSNS 773
 QY 823 VKPEEGOLVLEERKGSQSVPMYVYVYIOAAGPLAFLVLMALFMLVWGSTAFSTMWLSY 882
 Db 774 V-----LVKREERETGVSMKVLERYQNALGGAMVVMVLVICYVLQVREYSSSTMSE 827
 QY 883 WIKOGSGNTVTYQNETSVSDSKMKNPHMOYVASTALSMAVMLILKAIRGVVFKGTLR 942
 Db 828 WTDG--TFKTHG-----PLFYNIYVALLSFGOVSVYLLINSYMLMSLSY 870
 QY 943 ASSRLDELFRILRSPKPEFDPPTTGRILNRFPSKMDDEVDRPLPQAEPIOWIILVFF 1002
 Db 871 AAKKHMDAMGSLIRKAWFEQTNPLGRILNRFKAKMDGIDRIVAVVNMWGSTIAOLLS 930
 QY 1003 CVMGIVGPMFVAVGPIVLSVILSVIIVSRVILRELKRLDNTIOSPFLSHITSIOGLA 1062
 Db 931 TVLIGIVSLTSLMILPLVFGAVLYQNTSREIKRMDSTRSRVYVNOFGALNGLS 990
 QY 1063 TTHAYKNGQELHRYOELLDNOAPFLFLCQAMBLAVRLDLISALITTTGLMTVLMHG 1122
 Db 991 SIRAYKAYDMAETINGRSMONNIRFTLVNMAANRMGLIRLEVGLGLVWVLASTASVAMQNG 1050
 QY 1123 QI--PRAYA---GLAISYAOLTGLOFTVRIASSETFARTSVBRINHYIKTISLEPAR 1177
 Db 1051 KAAHQVYASTMGDLSTALSTSSLTAVLRKLASLANSLSNVERVANYIETIP--EAPLV 1109
 QY 1178 IKRKASPDMPORGEVTFENAEKRYRENPLVLVKVYFTTIKPKKIKIYVRTGSGKSLG 1237
 Db 1110 IENNRPPGPMRSGSSIKFEDEVYLRKYRELPLVHLGVSFLISPMKQVIGVGTGKSGSSL 1169
 QY 1238 MALFRLVELSGGCIKIDGVRISDGLADRSKLSIIPQEPVLSGTVRSNLDPENQYTED 1297

Db 1170 NALFRIVELEKGRLLIDECTDGRGLMDLKRKVLGITQAPVYLSGTVRFNLDPPSEMDA 1229
 QY 1298 QIWDALERTHMKKECIAOLPPLKLESEVMEGNDPNSVSGRCLICARALLRCKIILDEAT 1357
 Db 1230 DLMESLERALHKTDIRNPPLGLDAEVEEAGENFSGVGOULLSLARALLRSKILVLEAT 1289
 QY 1358 AAMDTELDLLOETIRAFADCTMTLTAHRLHYVLSGDRIMVLAQGVVEEDPVSLLSN 1417
 Db 1290 AAVDRVRDVLIOKTIREEFRCTMLLHRLNLTIIDCDKVLVDGSKVQERSSPENLLSN 1349
 QY 1418 DSSRFYAM 1425
 Db 1350 GESSFSRM 1357
 RESULT 11
 US-09-935-625-26956
 ; Sequence 26956, Application US/09935625
 ; GENERAL INFORMATION:
 ; APPLICANT: N. ALEXANDROV et al.
 ; TITLE OF INVENTION: POLYNUCLEOTIDES, POLYPEPTIDES, CELLS, AND METHODS THEREOF CAPA
 ; TITLE OF INVENTION: MODULATING VARIOUS RESPONSES
 ; FILE REFERENCE: 2750-1481P
 ; CURRENT APPLICATION NUMBER: US/09/935,625
 ; CURRENT FILING DATE: 2001-08-24
 ; NUMBER OF SEQ ID NOS: 33136
 ; SEQ ID NO 26956
 ; LENGTH: 1529
 ; TYPE: PRN
 ; ORGANISM: Arabidopsis thaliana
 ; FEATURE:
 ; NAME/KEY: peptide
 ; LOCATION: 1..1529
 ; OTHER INFORMATION: Ceres Seq. ID no. 3447800
 US-09-935-625-26956
 Query Match 27.7%; Score 2023.5; DB 5; Length 1529;
 Best Local Similarity 34.4%; Pred. No. 1.2e-141;
 Matches 478; Conservativity 239; Mismatches 500; Indels 171; Gaps 21;
 QY 74 EENPKKYHHGLSALKRITRTCKHQHPVDNAGLFSCMTFSWLSLAVAAKKGSLMEDY 133
 Db 124 EELPGE-----NICPERH-----ANLFDISFFSWLNLMTLIGSR--PLTEKDV 166
 QY 134 WSLSKHSSDVNCRRLERIMOELNEVGPDAASLRVAVWJFCRRLTSLIYCLMITQLAG 193
 Db 167 WHLDTWKTEETLHRSFQKSMDELEKRP-----W-----LIRALNSLGG 207
 QY 194 -----FSGPAMVKKHLEETOATES---NLQYSLVLGLLLEIVRSW 234
 Db 208 RFWMGFGWKIGNDCSQVGP--LLINELLSKMQNEPAMIGIYIAISFVGVLGCE-- 264
 QY 235 SLALTMALNRTGVRGLGAILTMAFKIILKIKNIKESL--GELINICSDGOMFPA 292
 Db 265 --AQYONVAMVGRVRLRSALIAAVFRKSLRLTEGRRKFPQTKITNMTDAESLQICQ 322
 QY 293 VGSLLAGPVAVALIGMIYVILGPGFGLGSAVFILFYPPAMFASRLTAVFRRCVATD 352
 Db 323 SLHTMSAPRIIVAILVILYQQLGVAIIIGALFLVLMFPIQIOTVIISKTOKLTKEGLQRTD 382
 QY 353 ERVQKNEVLTITKIKMAYAVKAFSOSVOKIREERRIIEKAGYFOSTIVGAPIVVI 412
 Db 383 KRIGLNEVLAAMDYKVCYAMENSFOSKYQTVRDEDELSPFRKQQLSAPFMFLINSIPVL 442
 QY 413 ASVTFESVHMTLGDLTAAQAFIVYVNSMTFALKVTPSPVSKLSASVAVDRFKSLFL 472
 Db 443 VTVVSFVFSVLGGLDLPAPAFITSLFSVLRPLFLPFLPITITOMVANVSLNLEEVLS 502
 QY 473 MEVHMINKNPASP-HIKIEMKNTLAMDSSSHSSIONSPLKTPRKMKDKRASRGKKEVR 531
 Db 503 TEERVLLPNPIEPGPALISIRNGYFSWDS----- 532

QY 532 QLOPTEHQAFLAOKGHLLDSDERPSPEEKGKHLHGLRLQRTLHSDLEIOGKLV 591
DB 533 -----KADRP-----TLNINLNDIPGSLV 552
QY 592 GICGVSQKTSLSAILGOM-TLEGSTAISTFAVYAQAAMILNATLRDNLFEKEDV 650
DB 553 AAVGSGEKTSLISAMGELPARSDATVTLRGSVAVYQVSWIFATVRDNLFGAPD 612
QY 651 EERYNSVLNSCCRPDLALPSSDLTEIGERGANLGGORORISLARALYSRSTIYLD 710
DB 613 QEKYERVIDVALQHDLELPGDLEIGERGVNISGGOKRVSMARAYNSDVCILDD 672
QY 711 PLSDADAHVNHIFNSAIRKHLKSKTVLFTHQLOLVDCDEVIFMKEGCITERGTHEL 770
DB 673 PLSDADAHVGOVFEKCIKRELQOTTRVLTNQLHFLSOVDKILVHEGTVKEGTYEEL 732
QY 771 MNLNGDYATIFNNL-----LIGETPPEVINSKKEKTSQOKSDOKPKTSIKKEKA 822
DB 733 CHSGPLFORLMEAGKVEDYSEENGEAEVDQTSVKPEVNGANNLQKDIETKNSKEGS 792
QY 823 VKPEGOLVQLEKOGSGPWSYGVYIOAAGPLAFVLYMALFMLNNGSTAFSTWMLSY 882
DB 733 V-----LVKREERETGVVSMKVLERYONALGAMVVMVLVCYVLTQVFRVSSSTWMLSE 846
QY 883 WIKOGSNTVTYRGNETSVSDSMKNDPHMOYASIVALSMAVMLILKAIKRGVAVKGLR 942
DB 847 WTDGSG---TPKTHG-----PLFTNYIYALLSFGQVSVTLINSLWMLMSLY 889
QY 943 ASSRLHDELFRRLRSPKMFEDPTPTGRLLNFRSKDMQEDVRLPQAEFMIONVILVF 1002
DB 890 AAKKHADMLGSLIRAPVFEFQTNPLGRILNRFADMGIDRTVAVFVMMFGSIAQLLS 949
QY 1003 CYGMAGVFPWVLAVGVLVILFVSLHYSKVLIREKLNDITQSPFSLTSSIOGIA 1062
DB 950 TVLLIGVSTSLMALMPLLVFYGAYLYQNTSRBIKMDSTTRSPVVAQGEALNGLS 1009
QY 1063 THAYANKQOEFLHRYOELLDDQAPFLEFTCAMRLAVRLDLISALTITTGIMTYLMS 1122
DB 1010 STRAYKADRAEINGRSMNIRFTLVMAANRMLGTRLEVLGGLMVLSTASLAVMONG 1069
QY 1123 QI--P-PAYA--GLAISAVAVOLTGLFOFTVRLASETEAFSTVERINHYIKRLSEAPAR 1177
DB 1070 KANOQAAVASTWGLLSLSTSLTAVLRASLAENSLNVERGNVIELPS-EAPLV 1128
QY 1178 IKNRPPSDMPOEGEYTEENAMERENDPLVKVSPFIKKEKIGVGRSGKSSIG 1237
DB 1129 IENNRPPGWPSSGSIKFEDEVVLRARPELIPVHLGVSEFLISPMKGVIGRFGAKSSIL 1188
QY 1238 MALPFLVELSGGCIKIDGVRISDGLADRSKLSIIPQPVLFSGTVRSNLDPPNYTED 1297
DB 1189 NALFIVELEKGRILIDECIDGRFGLMDRKVLGIIPQAPVLFSGTVRSNLDPPSHNDA 1248
QY 1298 QIWDALERTHMEKCIAPQLKLESEVENMGDNFSGVEROLCITARALLHCKILLIDEAT 1357
DB 1249 DMESLEBAHLKDTIRRNPLGDAEVTGEGNFSGORQLLSARALLRKSIIIVIDEAT 1308
QY 1358 AAMDTETDLLOETREAPADCTMLTIAHRLHTVLGSDRIWLAGOVFEPTPSVLLSN 1417
DB 1309 AAVDRTVTLQKTIREFKSCMTMLIAHRLNTIIDCKVLVDGSKVQFESSPELISN 1368
QY 1418 DSSRYAM 1425
DB 1369 GESSFSKM 1376

FILE REFERENCE: 2750-1481P
CURRENT APPLICATION NUMBER: US/09/935, 625
CURRENT FILING DATE: 2001-08-24
NUMBER OF SEQ ID NOS: 33136
SEQ ID NO 26955
LENGTH: 1622
TYPE: PRP
ORGANISM: Arabidopsis thaliana
FEATURE:
NAME/KEY: peptide
LOCATION: 1..1622
OTHER INFORMATION: Ceres Seq. ID no. 3447799
US-09-935-625-26955
Query Match 27.7%; Score 2023.5; DB 5; Length 1622;
Best Local Similarity 34.4%; Pred. No. 1,4e-141;
Matches 478; Conservative 239; Mismatches 500; Indels 171; Gaps 21;
QY 74 EEPKCKYHHGLSALKPIRTCKKHOPVDNAGLFCSCMFSWLSLARVAHKKGELSMEDY 133
DB 217 EELPGGE-----NICPERH---ANLFSIFSWMLPMTLGSKR-PLTEKDV 259
QY 134 WSLSKHSSDVNCRRLERLMOEELNEVGPDASLRVWVIFCTRLLISVICIMITOLAG 193
DB 260 WHLDTMDKTETLMRSFQKMDKELEKRP-----W-----LLRALNNSLGG 300
QY 194 -----FSPAPFVWHLLEYQATES---NLOYSLLVGLLLEYVRSW 234
DB 301 RFWMGFWKIGNDCSQVAP-LLLNELLSKMOLENPAMWIGYIYAISIFGVVGLVCE-- 357
QY 235 SLATMALVRRGVRLRGALILMAFKLILKIKRKSU--GELINICSDGORMEAA 292
DB 358 --QOIFQNVKRGYRLRSALIAVFRKSLRNLNEGKKKQOTGTITVLMNTDASLQIQ 415
QY 293 VCSLLAGCPVVALILGIMYVILIGPTFLGSAVFLIFPAMFASRLTAVFRKCYAARD 352
DB 416 SLHTMSAFRIIVALLVLYQOGLVASITIGALEFLVMPFIQYIISKTKLTFEGLOIRD 475
QY 476 KRIGLNEVLAAMDYKCAWENSFOKQVAVDDLSMFRKQLLSAFNMFLNISIPVY 535
DB 413 ASVTFESVMTIGFDLTAQAFVTVVFNMSMFLKLVTFPSVKSLSAAYVDRSFL 472
QY 536 VTVVSFGVSLGGDLTPRAFTSLSLFSLRPLEMLNIIQVMNANVSLRLEVIS 595
QY 473 MEEVNIKKRPASP-HIKTEKMATLAMPSSHSIONSPLTPMKMKOKRASRGKEKVR 531
DB 596 TEERVLLPPIEPGQPAISIRNGYRWS----- 625
QY 532 QLOPTEHQAFLAOKGHLLDSDERPSPEEKGKHLHGLRLQRTLHSDLEIOGKLV 591
DB 626 -----KADRP-----TLNINLNDIPGSLV 645
QY 592 GICGVSQKTSLSAILGOM-TLEGSTAISTFAVYAQAAMILNATLRDNLFEKEDV 650
DB 646 AAVGSGEKTSLISAMGELPARSDATVTLRGSVAVYQVSWIFATVRDNLFGAPD 705
QY 651 EERYNSVLNSCCRPDLALPSSDLTEIGERGANLGGORORISLARALYSRSTIYLD 710
DB 706 QEKYERVIDVALQHDLELPGDLEIGERGVNISGGOKRVSMARAYNSDVCILDD 765
QY 711 PLSDADAHVNHIFNSAIRKHLKSKTVLFTHQLOLVDCDEVIFMKEGCITERGTHEL 770
DB 766 PLSDADAHVGOVFEKCIKRELQOTTRVLTNQLHFLSOVDKILVHEGTVKEGTYEEL 825
QY 771 MNLNGDYATIFNNL-----LIGETPPEVINSKKEKTSQOKSDOKPKTSIKKEKA 822
DB 826 CHSGPLFORLMEAGKVEDYSEENGEAEVDQTSVKPEVNGANNLQKDIETKNSKEGS 885
QY 823 VKPEGOLVQLEKOGSGPWSYGVYIOAAGPLAFVLYMALFMLNNGSTAFSTWMLSY 882

Db 886 V-----LKRERETGVVSMKLERONALGAMVVMVLYTVLQVFRVSSSTWLS 939
 Qy 883 WIKOSGNTVTTRGNETSVSDSMKDNPHMOYASIVASMAVMLIKAIQVGVFKGTLR 942
 Db 940 WTDGSG---TPKTHG-----PLFYNIYVALLSFGQVSYTLINSYMLINSSLY 982
 Qy 943 ASSRLHDELFRILRSPKMFEDTTPGRIILNRSKDMDEVNLPQAEFIONVILYVF 1002
 Db 983 AAKKMDAMGLSILRAPMVEFQTNPLGRILNRPKMGDIDRTVAVAVNMFGSIAQLLS 1042
 Qy 1003 CVMGIAGVFPWFLVAVGPIVLSVLIYSRVILREKLKNDITQSFSLHTSSIOGLA 1062
 Db 1043 TVLILIGIVSTLSMALIMPLIVFYGAVLYQNTSREIKRNDSTTRSPVYAQFGBALNGLS 1102
 Qy 1063 TTHAYNGQGEFLHRYOELLDDNOAPFLFTFCAMRWLAVERLDLSIALITTTGLMIVLMHG 1122
 Db 1103 SIRAYKAYDMAELINGRSMONNIRFLVNMNAANRWLGIRLEVJGLMWTATSLAWQNG 1162
 Qy 1123 QI--PRAYA---GLAISYAVOLTGLFOFYVRLASETEARTSVYERINHYIKTISLEAPAR 1177
 Db 1163 KANMOQAVASTMGLLSLALSTISLTAVALRLASLAEINSLSYERGVNTEIIPS-EAPLV 1221
 Qy 1178 IKKKAAPSPMPQGEVTEFNAEMRYRENPLVLKVSFTIKPEKIGIVGRSSGKSLG 1237
 Db 1222 IENRRPPGHPSSGSIKEDVYVLRPELDPVLHGVSELSIPMDKVGIVGRGAGSSLL 1281
 Qy 1238 MALFRLVELSGGCIKIDGVRIISDGLADLSKLSIIPQEVLFSGTVRSMIDPEFNYOTED 1297
 Db 1282 NALFRIVELEKGRILIDECIDGRFLMDLAKVLIIPQAVLFSGTVRFLDPESEHND 1341
 Qy 1298 QITDALEIRHMKCIANOLPKLESEVWENGDNVSVEGROLCTARALLRCKILLIDDEAT 1357
 Db 1342 DIMESLERHALKOTIRNPLGIDAETVGEAGENSVCOROLSLARALLRSKSLIVDEAT 1401
 Qy 1358 AAMDTEFDLLOETIREAFADCTMTLTAHRLKTVLGSRIWLAQOVGEPDPSVLLS 1417
 Db 1402 AADVATDVLIQKTIREEFRCSTMLIAHRLNIIIDCKVLYVDSGKVOEFSPEENLLSN 1461
 Qy 1418 DSSRFYAM 1425
 Db 1462 GESSFSKM 1469
 RESULT 13
 US-09-935-625-26574
 ; Sequence 26574, Application US/09935625
 ; GENERAL INFORMATION:
 ; APPLICANT: N. ALEXANDROV et al.
 ; TITLE OF INVENTION: POLYNUCLEOTIDES, POLYPEPTIDES, CELLS, AND METHODS THEREOF CAPABLE
 ; FILE REFERENCE: 2750-1481P
 ; CURRENT APPLICATION NUMBER: US/09/935,625
 ; NUMBER OF SEQ ID NOS: 33136
 ; SEQ ID NO 26574
 ; LENGTH: 1510
 ; TYPE: PRT
 ; ORGANISM: Arabidopsis thaliana
 ; FEATURE:
 ; NAME/KEY: peptide
 ; LOCATION: 1..1510
 ; OTHER INFORMATION: Ceres Seq. ID no. 3087738
 US-09-935-625-26574

Query Match 27.6% Score 2013.5; DB 5; Length 1510;
 Best Local Similarity 34.3%; Pred. No. 6,8e-141;
 Matches 476; Conservative 240; Mismatches 501; Indels 171; Gaps 21;

Qy 74 EEHPKGVHGHGSLALPKPIRTCKHQHPVDNAGLFCMSTFMSLSLARVAHKKGELSMEDV 133
 Db 105 EELPGE-----NICEPRH-----ANLFDSTIFSWLPLMTLGSKR-PLIEKDV 147

Qy 134 WLSKHESSDVNCRRLERLMOBELNEVGPDAASLRVWJFCRTRLILSLVCLMIILOLAG 193
 Db 148 WHLDWKTETELMRSEFOKSDKELEKPP-----W-----LLRALNLSLIG 188
 Qy 194 -----FSGAPVWKHLLEYTOATES---NLOYSLILVLGLLLEIYRSW 234
 Db 189 RFWMGGRWKIGNDGSOVGP-LILNELKSMOLNEPAMICYITAIISFVGVGLVGE-- 245
 Qy 235 SLATWALNRYGVRLRGALITLMAFKKILKLNKIKESL--GELINICSDGORMEAAA 292
 Db 246 --AQYFQNVNRVGRRLRSALIAAVFRKSLRDLNGBRKKFGTKITNLTMTDASLIQICQ 303
 Qy 293 VGSILAGPVALICMTYNYIILGPIGFLCSANFIFLYPMMASRLTAFRRKCAATD 352
 Db 304 SLHTMSPAPRIIVAILVLYOQLGVASIIIGALFVLMFPIDYIISKTQRLTREGIORTD 363
 Qy 353 ERYOKMNEVLTYYKFKIMVAMVKAFFSGSVOKIREEERILLEKAGYFOSITVGAPIYVY 412
 Db 364 KRGLMNEVLAADTVKCYAMENSFOKSVOTVRDDELSPFRKQOLLSAFNMFTJNSTPVL 423
 Qy 413 ASVYTESVHMTLGFDDLTAQAFTVTVFNSMTFAALKVTPSVKSLSEASVAVDRFKSLFL 472
 Db 424 VTVVSEGVFSLGGDLTPARAFTSLSLFVLRPLPLPNIITQMVANVSLNRLEEVLS 483
 Qy 473 MEYVHMINKRPAE-HIKIMKANATLAMDSSHSSIONSPLKTRPKMKDKRASGKKEVR 531
 Db 484 TEERVLVLPNPIEPGPAISIRNGYSWDS----- 513
 Qy 532 QLORTHEQAVLAQKGLLLDSDERPSEDECKHHHLRLQRTLSIDLETOEGKLV 591
 Db 514 -----KADRP-----PLSNINLIDPLGSLV 533
 Qy 592 GIGSVSGKTSLSIALIGOM-TLEGSIAISGTFAYVAQOAMTLNATLDNITLFGKEYD 650
 Db 534 AVVSGTEGKTSLSIAMLGELPARSDATVTLRGSVAVPVQVMFNATVBDNITLFGAPFD 593
 Qy 651 EERYNSVNLCCRLPDALILPSSDLTEIGRGANLSGGQQRISLARALSDSITLDD 710
 Db 594 QERYERIVDTALQHDLELLPGGDLTEIGRGVNIISGGQKQRVSMARVANSNDVCLTE 653
 Qy 711 PLALDAHVNHIFNSAIRKLSKTVLFYTHOLOYLVDDEYIFMKEGCTIRGTFHEEL 770
 Db 654 PLSLALDAHVGOYFKEKIRKELGOTTIVLTNOLHPLSQVDKILLVNHEGVKREGIYEL 713
 Qy 771 MNLNGVATIFNNL-----LLGETPVEINSKKEKTSQSKKSDKGRPKTSIKKEKA 822
 Db 714 CHSGPLFPRIMENAGKVEDYSEENGAEVHQTSVKPVENGNANMLQDGIETKNSKEGNS 773
 Qy 823 VKREEGOLVBLEKGGQSVWMSYGVYIOAGGPRLAVLYMALPMLNVGSTASTWMLSY 882
 Db 774 V-----LVKREERETGVVSMKLERONALGAMVVMVLYTVLQVFRVSSSTWLS 827
 Qy 883 WIKOSGNTVTTRGNETSVSDSMKDNPHMOYASIVASMAVMLIKAIQVGVFKGTLR 942
 Db 828 WTDGSG---TPKTHG-----PLFYNIYVALLSFGQVSYTLINSYMLINSSLY 870
 Qy 943 ASSRLHDELFRILRSPKMFEDTTPGRIILNRSKDMDEVNLPQAEFIONVILYVF 1002
 Db 871 AAKKMDAMGLSILRAPMVEFQTNPLGRILNRPKMGDIDRTVAVAVNMFGSIAQLLS 930
 Qy 1003 CVMGIAGVFPWFLVAVGPIVLSVLIYSRVILREKLKNDITQSFSLHTSSIOGLA 1062
 Db 931 TVLILIGIVSTLSMALIMPLIVFYGAVLYQNTSREIKRNDSTTRSPVYAQFGBALNGLS 990
 Qy 1063 TTHAYNGQGEFLHRYOELLDDNOAPFLFTFCAMRWLAVERLDLSIALITTTGLMIVLMHG 1122
 Db 991 SIRAYKAYDMAELINGRSMONNIRFLVNMNAANRWLGIRLEVJGLMWTATSLAWQNG 1050
 Qy 1123 QI--PRAYA---GLAISYAVOLTGLFOFYVRLASETEARTSVYERINHYIKTISLEAPAR 1177
 Db 1051 KANMOQAVASTMGLLSLALSTISLTAVALRLASLAEINSLSYERGVNTEIIPS-EAPLV 1109
 Qy 1178 IKKKAAPSPMPQGEVTEFNAEMRYRENPLVLKVSFTIKPEKIGIVGRSSGKSLG 1237

Db 1110 IENNRPPGPPSSGSIKFEDEVYLRKRPDLVPLHGVSFLLSPMDKGIYGRGAGKSSLL 1169
Qy 1238 MALFRLVELSGGCIKIDGRISDGLADLRKSLIIPQEPVLFSGVYRNLDPFNQYED 1297
Db 1170 MALFRLVELSKRILIDECIDGRFGLMDLRKVYGLIPQAVLFSGVYRNLDPFSEHNA 1229
Qy 1298 QIWDALERTHMEKCIADLPKLESEVMEGNDNFSGVEROLLICARALLRCKILLIDEAT 1357
Db 1230 DLMESLERHLKDTIRRNPLGDAEYTEGENFSGVGROLLISARALLRCKILLIDEAT 1289
Qy 1358 AAMDTELDLIQETIREAFADCTMLTIAHRLHTVLSGDRIMVLAQGVYEFDPSPVLSLN 1417
Db 1290 AAVDRTDVLIOKTIREEFKSCMTLIIAHLRLNTIIDCDKVLVDGKVGFEFSSPENLISN 1349
Qy 1418 DSSRFYAM 1425
Db 1350 GESSFSKM 1357

RESULT 14
US-09-935-625-26573
; Sequence 26573, Application US/09935625
; GENERAL INFORMATION:
; APPLICANT: N. ALEXANDROV et al.
; TITLE OF INVENTION: POLYNUCLEOTIDES, POLYPEPTIDES, CELLS, AND METHODS THEREOF CAPABLE
; FILE REFERENCE: 2750-1481P
; CURRENT APPLICATION NUMBER: US/09/935,625
; CURRENT FILING DATE: 2001-08-24
; NUMBER OF SEQ ID NOS: 33136
; SEQ ID NO 26573
; LENGTH: 1529
; TYPE: PRT
; ORGANISM: Arabidopsis thaliana
; FEATURE:
; NAME/KEY: peptide
; LOCATION: 1..1529
; OTHER INFORMATION: Ceres Seq. ID no. 3087737
US-09-935-625-26573

Query Match 27.6%; Score 2013.5; DB 5; Length 1529;
Best Local Similarity 34.3%; Pred. No. 7e-141;
Matches 476; Conservative 240; Mismatches 501; Indels 171; Gaps 21;

Qy 74 EHPKGYHHGLSALKPIRTCTKHQHPVDNAGLFCSCFESWLSLARVAHKKGLSMEDY 133
Db 124 BELPGE-----NICPERH---ANLFDSIFPSWLNPLMTLSKR-PLREKDY 166
Qy 134 WSLSHSSDVNCRRLERIMOELNEVGDAASLRVWVIFCKTRLILISVCLMTQLAG 193
Db 167 WILDWTKETELMRSFQKWDKELEKPKP-----W-----LLRLANSLSG 207
Qy 194-----ESGPAFMVKKHLEFYQATES---NLOYSLILVGLLITELVRSM 234
Db 208 RFWMGGFYKIDGCSQFQVPR-LILNELKSMQINPEAMIGYIAISIFGVGVGICE-- 264
Qy 235 STATWALNYRTGVRLRGAILTMAFKILIKLNIEKSL--GELINIGSNDGQRMFEAA 292
Db 265 --AQFQONMYRGYRLRSRLIAAVFRKSLRLTNEGKRRQYTKITMLMTTDAESLQIQ 322
Qy 293 VCSLLAGEVVAAILGMITVITLGPGLGSAVFILFYPAAMFASLTAYFRRKCYAAND 352
Db 323 SLHTMWSAFRITVALVLLYQOLGVAISIGALFLVLMFPICQIVITISKTKLKEGLQRPD 382
Qy 353 EKVQKNEVLYIKFIKMYAMWKAPSQSOXKIREERRLILEKAGYQSTVGAPVIVY 412
Db 383 KRIGLNEVLAAMDYVKQKCAVENSFQKVOYVDDLSWFRKQOLLSANMFLINSIPVL 442
Qy 413 ASVVTFSVMTLGFDLTAQAFTVTVFVENSMTFALKVTPEFSYKSLSEASVAVDREKSLFL 472
Db 443 VVVSFGVSLTGGDLTPARAFTSLSLFSVLRPFLMLNIIITQMANVANSLNRLRELVIS 502

Qy 473 MEEVHIKKNPASP-HIKIEMKNATLAWDSSHSISQNSPKLTPEKMKDKDRASRKKKEKVR 531
Db 503 TEERVLLPNPPIPPGQPAISIRNGYFSDS----- 532
Qy 532 QLORTEHOAVLAROKGHLLLDSDERSPEEBEGKHILGHLRLQRLHSIDLEIOECKLV 591
Db 533-----KADRP-----TLSNINLIDPLGSIY 552
Qy 592 GICGSVSGKTSLSIALIQOM-TLLEGSIASITFAYVAQAMILNATLRDNLIFCKEYD 650
Db 553 AAVSGTGEQTSLSISAMGELPARSDATVYLRGSVAVYVPQVSWIFATYADNLLFGAPFD 612
Qy 651 EERYNVSUNSCCRPLDPLATIPSSDLTEIGERGNLSGGQORSLARALYSDRSIYILD 710
Db 613 QEKTERVIDYALOHDELPLGGDLTEIGERGVNISGGQKORVSMARAVYNSDVCILDE 672
Qy 711 PLSALDAHVGNHIFNSAIRKHLKSKTVLFYTHOLOYLVDCEVIFPKKGCITERTHEEL 770
Db 673 PLSALDAHVGQGVFEKCIKRELQOTTRVLTNQLHFLSQVDKTLVHEGTVEKEGYEEL 732
Qy 771 MNLNGYATITFNNL-----LLGETPVEINSKKEKTSQSKSQDKPKTGSIKKKA 822
Db 733 CHSGPLFPRIMEAGKVEDYSEENGAEVYHQTSVKPEVNGNANNLQDKGIEITRNSKEGNS 792
Qy 823 VKPEBQVLOLEKKGSGSVPMVSYGYVIAAGPLAFVIMALFMLNVSTAFSTWMLSY 882
Db 793 V-----LVKREERETGVSWKVLERYQNALGAMVMMVILCYVLTQYERVSSITWLS 846
Qy 883 WIKQSGNTVTYRGNETSVSDSKDNPDMQYVSIYALSAVMLILKAIGVYFVKTLR 942
Db 847 WIDSG---TPKTHG-----PLFYNIYVALLSFGVSYVTLINSYMLNSSLX 889
Qy 943 ASSRLDELFERRILRSMPKEFDTTPGRLILRPSKMDDEVYVLRPOAEMIGNVILVFF 1002
Db 890 AAKKMDAMGLSILRAPVWFQTNPLGRILIRBAKMDGIDIRVAVFVNMFGSIQLLS 949
Qy 1003 CVGMINGVPPWFLVAVGPLYLFSVLHIVSRVILRELRKDINTQSPFLSHITSSIOGLA 1062
Db 950 TVLLIGIVSTLSLMAIMPPLVLYVGAYLYXQNTSREIKRNDSTTRSVVAQFGEALNGLS 1009
Qy 1063 TIHAYKGOEFLHRYOELDDNOAPFELFTCAMRWLAVRLDLISALITTTGLMIYVMHG 1122
Db 1010 SIFAYVAYDMAINGRSDNNIRFTLVNMAARWIGLIRLEVGLGMVMTTASLAWQNG 1069
Qy 1123 QI--PRAYA---GLAISYAVOLGTLPQFVYRLASETEARETSVERINHYIKTLSLEAPAR 1177
Db 1070 KANQQAAYASTWGLLLSYALSTISLAVYRLASLAEKNSLNSVBRGVNVIETPS-EAPLV 1128
Qy 1178 IKNKAPSPDPQGEVYTERNAEKRYRENLPVLYKKYSFTIKPEKIGIVRTSGKSSLG 1237
Db 1129 IENNRPPGPPSSGSIKFEDEVYLRKRPDLVPLHGVSFLLSPMDKGIYGRGAGKSSLL 1188
Qy 1238 MALFRLVELSGGCIKIDGVRIIDGLADLRKSLIIPQEPVLFSGVYRNLDPFNQYED 1297
Db 1189 NALFRLVELSKRILIDECIDGRFGLMDLRKVYGLIPQAVLFSGVYRNLDPFSEHNA 1248
Qy 1298 QIWDALERTHMEKCIADLPKLESEVMEGNDNFSGVEROLLICARALLRCKILLIDEAT 1357
Db 1249 DLMESLERHLKDTIRRNPLGDAEYTEGENFSGVGROLLISARALLRCKILLIDEAT 1308
Qy 1358 AAMDTELDLIQETIREAFADCTMLTIAHRLHTVLSGDRIMVLAQGVYEFDPSPVLSLN 1417
Db 1309 AAVDRTDVLIOKTIREEFKSCMTLIIAHLRLNTIIDCDKVLVDGKVGFEFSSPENLISN 1368
Qy 1418 DSSRFYAM 1425
Db 1369 GESSFSKM 1376

RESULT 15
US-09-935-625-26572
; Sequence 26572, Application US/09935625

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; GENERAL INFORMATION:
; APPLICANT: N. ALEXANDROV et al.
; TITLE OF INVENTION: POLYNUCLEOTIDES, POLYPEPTIDES, CELLS, AND METHODS THEREOF CAPABLE
; OF INVENTION: MODULATING VARIOUS RESPONSES
; FILE REFERENCE: 2750-1481P
; CURRENT APPLICATION NUMBER: US/09/935,625
; CURRENT FILING DATE: 2001-08-24
; NUMBER OF SEQ ID NOS: 3136
; SEQ ID NO 26572
; LENGTH: 1622
; TYPE: PRF
; ORGANISM: Arabidopsis thaliana
; FEATURE:
; NAME/KEY: peptide
; LOCATION: 1..1622
; OTHER INFORMATION: Ceres Seq. ID no. 3087736
US-09-935-625-26572

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Query Match 27.6%; Score 2013.5; DB 5; Length 1622;
Best Local Similarity 34.3%; Pred. No. 7.6e-141;
Matches 476; Conservative 240; Mismatches 501; Indels 171; Gaps 21;

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QY 74 EEPKKGHHGSLAKRIRTKQHVDNAGLFSCMTFSLSLAVAKKGLSMDY 133
DB 217 EEPKGG-----NICPRH---ANLFDSTFFSWLNLMLGSKR-PLTEKDV 259
QY 134 WSLKHESSDVNCRRLERLMOEELNEVGPDAASLRVWTFRCRTLLISVCLMTQLAG 193
DB 260 WHLDYMDKTEFLMRSPQSKMDKEKRP-----W-----LLRALNNSLGG 300
QY 194 -----FSGAFMKHLEKTYQATES---NLOVSLDVLGLLLEIVRSW 234
DB 301 RFWGWGFWKIGNDCSQVGF-LLLNELKSMQLENPAMIGYIYASIFGVGLVGLCE-- 357
QY 235 SLALYALNRTGVRLGALITLMAFKKILTKNIKESL--GELINCSNDGOMFEAA 292
DB 358 --AQYQNVNRVGRSLALIAAFKSLRLTYEGRKKEFGTKTNMTTDAESLQOIQ 415
QY 293 VGSLLAGPVAILGMYNYIILGPTGLGSAVFILFYPMMEFASRLTAVERRCVATD 352
DB 416 SLTMTMSAPRIIVALLVLYQOLGVASIIAGLPLVLMFPIQYIISTOKITKGLDRTD 475
QY 353 ERYOKNEVLTLYIKIKMAYKAFSOSVQKIEERRILKAGYFQSITGVAPIVVI 412
DB 476 KRIGLMEVLAAMDYVCYAMENSFOGKQYQTVRDELSPFKAQLLSAFNMFILNSIPV 535
QY 413 ASVYTPSVHNTLGEDTLAAGATVYVYVNSMTALKYTPSVKSLASAVAVDRFKSLFL 472
DB 536 VTYVSGVFSLLGDLTPAPAFYSLSFVLRFLFPLMPLNITQMVANVNSLNLLEVL 595
QY 473 MEEVHMINKNPASP-HIKIKMKNATLAMDSSHSSSIONSPKLTTPMKKDKRASRGKKEVR 531
DB 596 TEERVLLPNPPIEPGPALISIRNGYPSWD----- 625
QY 532 QLORTEHQAVLABQKGLLLDSDEPSPPEEKEKHHLGLRLQRTLASIDLEIQEKL 591
DB 626 -----KADRP-----TLNINLIDPLGSLV 645
QY 592 GIGSGVSGKTSLSATLQGM-TLLEGSIAISGTFAYVAQOANTLNTLDNILFGKEYD 650
DB 646 AAVGSGEGKTSLSISAMLGELPARSDATVTLRGSVAVPOVSWTFNATVNDILFGAPFD 705
QY 651 EERYNSVNLNCCRLPDLAIPSSDLTEIGERGANLGGGROKORISLARALSDRSIYLLD 710
DB 706 QEKTERVIVDTALQHDLELLPGGDLTEIGERGYNISGGOKORVSMARAVTSNSDVCILDE 765
QY 711 PLSALDAVGNHIFNSAIRKHLKSKTVLFYTHOLOYLVDCEVIFMKEGCTITERGTHEEL 770
DB 766 PLSALDAHQVQVEKCIKRELQGTTRFLVLTNQLHLFSQVDKILLVHEGTVKEGTEEL 825
QY 771 MNINGDIATIFNNL-----LLGETPVEINSKETSGSKSODKGPRTSIIKKEKA 822

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DB 826 CHSGPLPRLMENAGKVEDYSEENGAEVHOTSVKPYENGANNLQDQIEFTKSKSGNS 885
QY 823 VKPEGOLVOLEEKGQGSVPWSYGVYIOAAGPLAFLVIMALEMLNVGSTAFSTWLSY 882
DB 886 V-----LVKREERETGVSKKVLBERONMLGAMVVMMLVICVLVOVFVSSITWLS 939
QY 883 WIKOGSGNTVYTRGNETSVSDSKMDNPMOYASIVALSNAVMILKAIKGVFVKSTLR 942
DB 940 WTDGSG---TPKTHG-----PLEYNIIVYALLSFGQVSIVLINSYMLIMSLSY 982
QY 943 ASSRLHDELFRILRSMPKFEPTPTGRIINRFSEKQDDEVDVRLPQAEQIOWVILYFF 1002
DB 983 AAKRMHDMAGSLIRAPVVEFQTNPLGRIINREKADMGDDIRYAVFVNMMSGIAOLLS 1042
QY 1003 CVGMIAGVFPWFLVAVGPLVILFVSLHIVSRVLLRELRKLDNITQSPFLSHITSSIOGLA 1062
DB 1043 TYVILIGIVSTLSLWAIMPLVLFYGAVLYQNTSREIKRMDSTTRSVYVQFGALNGLS 1102
QY 1063 TIHAYNKQOEFLHRYOELLDNOAPFELFTCAMRWLAVRDLISALITTTGLMIVLMHG 1122
DB 1103 SIRAYKAYDRMAEINGRSMNINIFTLVNMMAANWLGIRLEVLGLGVMWMTASLAVMQNG 1162
QY 1123 QI--PRAVA---GLAISYAVOGLPQFYVPLASETEARFTSVSRINHXIKTISLEAPR 1177
DB 1163 KANQOAVASTMGLLSYALSTISLTAVALRLASLANSLSNVERGVNYLEIPS-EAPLV 1221
QY 1178 IKNKAPSPDWPQOEQEVTFENAEKMYRENPLVLEKVSFTIKPKKIGIVGRTSGSKSLG 1237
DB 1222 IENNRPPPGMSSGSIKFEVDVLYKRPDLPRVHLGVSFLISPMKVGIYGTGAGKSSLL 1281
QY 1238 MALFRVLESGCCIKIDGVKISIDIGLADRSKSLIIOEPVLSGTYRSNLDPPNOYTED 1297
DB 1282 NALFRIVELEKGRILIDECDIGRGLMDLRKVGGIIOAPVLFSGTVRFNIDPSEHND 1341
QY 1298 QIMDLRTHMKKECTIAOLPLKLESEVMENGDNPFVGRKOLICARALLRHCKIILDEAT 1357
DB 1342 DLMSELRHAKDKOTIRKPNPLGLDAEVTGAGENSVGROGLSLARALLRSLKILLVDEAT 1401
QY 1358 AAMDTELDLIOETIREAFADCTMLTAHRLHVLVSGDRIMVLAQGVVEFDPSPVLSN 1417
DB 1402 AAVDVRIDVLIQKIRIREFNSCTMLIAHRLNTIIDCDKVLVLDGKVGQERSSEPNLSN 1461
QY 1418 DSRFFYAM 1425
DB 1462 GESSFSKM 1469

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Search completed: August 11, 2002, 11:13:47
 Job time: 6422 sec

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OM nucleic - nucleic search, using sw model

Run on: August 11, 2002, 09:13:40 ; Search time 92.45 Seconds
(without alignments)
12878.157 Million cell updates/sec

Title: US-09-528-031-1

Perfect score: 4847

Sequence: 1 GGCATCATGCTCGGAGCGCTG.....AAAAAAAAAGGCGGCCGC 4847

Scoring table: IDENTITY_NUC

Gapop 10.0 , Gapext 1.0

Searched: 383533 seqs, 122816752 residues

Total number of hits satisfying chosen parameters: 767066

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-Processing: Minimum Match 0%

Listing first 45 summaries

Database : Issued Patents, NA:*

1: /cgn2_6/prodata/2/lna/5A_COMB.seq:*
2: /cgn2_6/prodata/2/lna/5B_COMB.seq:*
3: /cgn2_6/prodata/2/lna/6A_COMB.seq:*
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5: /cgn2_6/prodata/2/lna/6CTUS_COMB.seq:*
6: /cgn2_6/prodata/2/lna/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	4847	100.0	4847	US-09-061-400-1	Sequence 1, App11
2	4775.4	98.5	4781	US-09-001-273-1	Sequence 1, App11
3	4775.4	98.5	4781	US-08-843-459A-1	Sequence 1, App11
4	511.2	10.5	5011	US-08-463-092B-3	Sequence 3, App11
5	511.2	10.5	5011	US-08-462-109A-3	Sequence 3, App11
6	511.2	10.5	5011	US-08-460-907B-3	Sequence 3, App11
7	511.2	10.5	5011	US-08-463-179A-3	Sequence 3, App11
8	511.2	10.5	5011	US-08-461-384B-3	Sequence 3, App11
9	506.4	10.4	5011	US-08-141-893-1	Sequence 1, App11
10	506.4	10.4	5011	US-08-463-092B-1	Sequence 1, App11
11	506.4	10.4	5011	US-08-462-109A-1	Sequence 1, App11
12	506.4	10.4	5011	US-08-460-907B-1	Sequence 1, App11
13	506.4	10.4	5011	US-08-463-179A-1	Sequence 1, App11
14	506.4	10.4	5011	US-08-461-384B-1	Sequence 1, App11
15	506.4	10.4	5011	US-08-407-207A-1	Sequence 1, App11
16	435.8	9.0	6140	US-09-439-313-535	Sequence 535, App
17	425.4	8.8	6082	US-09-439-313-535	Sequence 535, App
18	420.4	8.7	5889	US-08-463-092B-5	Sequence 535, App
19	420.4	8.7	5889	US-08-462-109A-5	Sequence 5, App11
20	420.4	8.7	5889	US-08-460-907B-5	Sequence 5, App11
21	420.4	8.7	5889	US-08-463-179A-5	Sequence 5, App11
22	420.4	8.7	5889	US-08-461-384B-5	Sequence 5, App11
23	370	7.6	4931	US-08-726-320-2	Sequence 2, App11
24	370	7.6	4931	US-09-208-716-2	Sequence 2, App11
25	346	7.1	4877	US-08-404-531B-7	Sequence 7, App11
26	346	7.1	4877	US-08-404-531B-8	Sequence 8, App11
27	346	7.1	4877	US-08-476-900A-7	Sequence 7, App11

28	346	7.1	4877	3	US-08-476-900A-8	Sequence 8, App11
29	346	7.1	4877	3	US-08-488-546A-7	Sequence 7, App11
30	346	7.1	4877	3	US-08-488-546A-8	Sequence 8, App11
31	344.4	7.1	5175	4	US-08-972-927-4	Sequence 4, App11
32	342.6	7.1	5110	2	US-08-404-531B-4	Sequence 4, App11
33	342.6	7.1	5110	2	US-08-404-531B-5	Sequence 5, App11
34	342.6	7.1	5110	3	US-08-476-900A-4	Sequence 4, App11
35	342.6	7.1	5110	3	US-08-476-900A-5	Sequence 5, App11
36	342.6	7.1	5110	3	US-08-488-546A-4	Sequence 4, App11
37	342.6	7.1	5110	3	US-08-488-546A-5	Sequence 5, App11
38	340.8	7.0	463	2	US-09-001-273-3	Sequence 3, App11
39	340.8	7.0	463	2	US-09-061-400-3	Sequence 3, App11
40	340.8	7.0	463	4	US-08-843-459A-3	Sequence 3, App11
41	336.2	6.9	5232	4	US-08-972-927-1	Sequence 1, App11
42	330.8	6.8	2454	2	US-08-404-531B-32	Sequence 32, App1
43	330.8	6.8	2454	3	US-08-476-900A-32	Sequence 32, App1
44	330.8	6.8	2454	3	US-08-488-546A-32	Sequence 32, App1
45	294	6.1	2294	2	US-08-404-531B-30	Sequence 30, App1

ALIGNMENTS

RESULT 1
US-09-061-400-1
; Sequence 1, Application US/09061400
; Patent No. 6077936
; GENERAL INFORMATION:
; APPLICANT: SHYJAN, Andrew
; TITLE OF INVENTION: NOVEL MULTIDRUG RESISTANCE-ASSOCIATED
; TITLE OF INVENTION: POLYPEPTIDE
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: LAHIVE & COCKFIELD, LLP
; STREET: 28 State Street
; CITY: Boston
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/061,400
; FILING DATE: 16-APRIL-1998
; CLASSIFICATION: 536
; ATTORNEY/AGENT INFORMATION:
; NAME: Elizabeth A. Hanley
; REGISTRATION NUMBER: 33,505
; REFERENCE/DOCKET NUMBER: MNI-056CP
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 227-7400
; TELEFAX: (617) 742-4214
; INFORMATION FOR SEQ. ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 4847 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: Linear
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 116..4426
; US-09-061-400-1

Query Match 100.0%; Score 4847; DB 3; Length 4847;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 4847; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
1 GGCATCATGCTCGGAGCGCTGAGCGGCGGCTGCTGAGCAGGCGCCAG 60
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Dh 1 GGCTCATGCTCGGAGCGTGTGAGCGGCTGGCGGTTGTCTGAGACAGAGGGGCGAG 60
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Dh 61 GAATTCGTGTAAGAACTAACGTCTGTGAGAGCCCTGGAACTCCCACTCGAGAAATGAA 120
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Dh 121 GGATATCGACATAGGAAAAAGATATATCATCCCACTCGGAGTGTAGAAAGTGTAGGA 180
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Qy 361 TCATGCTTGAAGTCTGTAAGCCCATCCGACTTGTCAAAACACGACACCCAGTGGGA 420
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Dh 1321 TGTGGGTGTGCTCCCATTTGTGTGTGATTTGCCAGCGGTGTGACCTTCTGTTCATAT 1380
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Db	2281	CATCTCAATAGTCC	TAATCCGGAACATCTCAAGTCCCAAGACAGTTC	GTGTGTGTTACCA		2340	
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QY	2401	GGAAGAAGGCA	CCCATGAGGAATCTGATGAATTTAA	TGTTGACTATGCTACATTTTAA		2460	
Db	2401	GGAAGAAGGCA	CCCATGAGGAATCTGATGAATTTAA	TGTTGACTATGCTACATTTTAA		2460	
QY	2461	TAACTCTTGCTGG	GAGACACACCGGCAGTTGGATCATATTC	CAAAAAAGGAACACAGTG		2520	
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Db	2521	TTTCACAGAAGA	AGTCAACAGAGGCTCTTAAACAGATCA	ATTAAGAAAGAAAAAGC		2580	
QY	2581	AGTAAACCCAG	AGGAAGGAGAGTGTGACAGCTGGGAAGAAAGGCGCTTAC	TA	CTGCTCC	2640	
Db	2581	AGTAAACCCAG	AGGAAGGAGAGTGTGACAGCTGGGAAGAAAGGCGCTTAC	TA	CTGCTCC	2640	
QY	2641	CTGGTCA	GTATATGTTCTACATCCACAGGCTGTGGGGGCGCCCTTG	GGCATTCCTGGTAT		2700	
Db	2641	CTGGTCA	GTATATGTTCTACATCCACAGGCTGTGGGGGCGCCCTTG	GGCATTCCTGGTAT		2700	
QY	2701	TATGGCCCTTT	CATGCTGAATGTAGGACACACCGGCTTC	CAGACACCTGGTGGTGA	GTAA	2760	
Db	2701	TATGGCCCTTT	CATGCTGAATGTAGGACACACCGGCTTC	CAGACACCTGGTGGTGA	GTAA	2760	
QY	2761	CTTGATTA	ACGCAAGGAAGCGGGAACACACTGTGACTG	GAGGAACAGACCTGGTGAG		2820	
Db	2761	CTTGATTA	ACGCAAGGAAGCGGGAACACACTGTGACTG	GAGGAACAGACCTGGTGAG		2820	
QY	2821	TGACAGATGA	AGGACAACTCTATGTGAGATCA	TGTGCACATCTAGCCCTCTCAT		2880	
Db	2821	TGACAGATGA	AGGACAACTCTATGTGAGATCA	TGTGCACATCTAGCCCTCTCAT		2880	
QY	2881	GGCAGTCATG	CTATCTCTGAAAGCCATTCGAGAGATGTCTT	GTCAAGGGCACGCTGCG		2940	
Db	2881	GGCAGTCATG	CTATCTCTGAAAGCCATTCGAGAGATGTCTT	GTCAAGGGCACGCTGCG		2940	
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Db	2941	AGCTTCC	CCGGCTGCATAGCAGGCTTTCCGAAGGATC	CTTCGAAAGCCCTATGAAT		3000	
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Db	3001	TTTTGA	ACGACACCCCAACAGGAGATTTCAACAGGTTT	CCAAAGACATGTAGAACT		3060	
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Db	3061	TGAGGTG	CGGCTCGCTCCAGGCGCAGATGTTCATCC	AGACGTTATCTCGTGTTCTT		3120	
QY	3121	CTGTGTGG	AATGATCGCAGAGTCTTCCCGTGTCTT	GTGGGAGTGGGGCCCTCTGT		3180	
Db	3121	CTGTGTGG	AATGATCGCAGAGTCTTCCCGTGTCTT	GTGGGAGTGGGGCCCTCTGT		3180	
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Db	3181	CATCCTTTT	CACTGTCTGTGACATTTCTTCACAGGCT	CTGATTTGGGAGCTGAAGCGCT		3240	
QY	3241	GGACAATAT	CACGACAGTCTTCTCTCCACATCA	AGTCCACACATACAGGCGCTTGC		3300	
Db	3241	GGACAATAT	CACGACAGTCTTCTCTCCACATCA	AGTCCACACATACAGGCGCTTGC		3300	
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Db	3301	CAACCATCCAGGCTTACAAATTAAGGGGACGAGATTCTTGACACAAATACACAGACCTCTGTGA	3360
Oy	3361	TCACAACCAAGCTCCCTTTTTTTTTTTTTTTTTTTTTTTTACGTGCGATGCGGTGGCTGTGCGGCT	3420
Db	3361	TCACAACCAAGCTCTCTTTTTTTTTTTTTTTTTTTTTTTTACGTGCGATGCGGTGGCTGTGCGGCT	3420
Oy	3421	GGACCTCATCAGCATGCGCCCTCATCACCACACAGGGGGGTGATGATCGTTATATGCACGG	3480
Db	3421	GGACCTCATCAGCATGCGCCCTCATCACCACACAGGGGGGTGATGATCGTTATATGCACGG	3480
Oy	3481	GGAGATTTCCCCCAGGCTATGGGGGTCGTGCCATCTCTTATGCTGTCCAGTTAACGGGGCT	3540
Db	3481	GGAGATTTCCCCCAGGCTATGGGGGTCGTGCCATCTCTTATGCTGTCCAGTTAACGGGGCT	3540
Oy	3541	GTTCAGTTTACGGTCAGACTGGCATCTGATCTGACAAAGTGCATTCCACTCGGTGGAGAG	3600
Db	3541	GTTCAGTTTACGGTCAGACTGGCATCTGATCTGACAAAGTGCATTCCACTCGGTGGAGAG	3600
Oy	3601	GATCAATCACTACATTAAAGACTCTGTCTTGGAGACACTGCGCAGAATTTAAGAACAAAGGC	3660
Db	3601	GATCAATCACTACATTAAAGACTCTGTCTTGGAGACACTGCGCAGAATTTAAGAACAAAGGC	3660
Oy	3661	TCCCTTCCCTGACTGACTGGCCCCAGAGAGAGAGTGCACCTTTGAGAACGCAAGATAGGTA	3720
Db	3661	TCCCTTCCCTGACTGACTGGCCCCAGAGAGAGAGTGCACCTTTGAGAACGCAAGATAGGTA	3720
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Db	3721	CCGAGAAAACCTCCCTCGTCTGCTTAAGAAATATCTTCAAGATCAAACTTAAGAGAA	3780
Oy	3781	GATTGGCATTTGAGGGGCGGACAGGATCAAGGAAAGTCTCGTGGGAGTGGCCCTCTTCGG	3840
Db	3781	GATTGGCATTTGAGGGGCGGACAGGATCAAGGAAAGTCTCGTGGGAGTGGCCCTCTTCGG	3840
Oy	3841	TCTGTGAGATTATCTGGAAGCTGCATCAAGATTATGAGAGTGAAGATCAGTATATTGG	3900
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Oy	3901	CCTTCCCGACCTCCGAGCAAACTCTGATCTCAAGGCGGGGCTTCAGAGG	3960
Db	3901	CCTTCCCGACCTCCGAGCAAACTCTGATCTCAAGGCGGGGCTTCAGAGG	3960
Oy	3961	CACGTCTCAGATCAAAATTTGGAGCCCTTCAACCACTGACACTGAAGCAAGATTGGGATGC	4020
Db	3961	CACGTCTCAGATCAAAATTTGGAGCCCTTCAACCACTGACACTGAAGCAAGATTGGGATGC	4020
Oy	4021	CCTGAGAGAGCACACATGAAAAGATGTAATGCTCAGCTACCTTGAAACTTGAATCTGA	4080
Db	4021	CCTGAGAGAGCACACATGAAAAGATGTAATGCTCAGCTACCTTGAAACTTGAATCTGA	4080
Oy	4081	AGTATGGAAGATGGGGGATTAATCTTCAGTGGGGGAAGGACGCTCTTGATAGCTAG	4140
Db	4081	AGTATGGAAGATGGGGGATTAATCTTCAGTGGGGGAAGGACGCTCTTGATAGCTAG	4140
Oy	4141	AGCCCTGTCCGCCACTGTAAAGATTCTGATTTAGATGAAGCAGCTGCATGGACAC	4200
Db	4141	AGCCCTGTCCGCCACTGTAAAGATTCTGATTTAGATGAAGCAGCTGCATGGACAC	4200
Oy	4201	AGAGACAGACTTATGATTCAAGAGACCATCCGAGAACATTGGCAGACTGTACATGCT	4260
Db	4201	AGAGACAGACTTATGATTCAAGAGACCATCCGAGAACATTGGCAGACTGTACATGCT	4260
Oy	4261	GACCATTTGCCATGCCCTGCACACGCGTTCTAGGCTCCATAGATTAAGGTGTGGGCCCA	4320
Db	4261	GACCATTTGCCATGCCCTGCACACGCGTTCTAGGCTCCATAGATTAAGGTGTGGGCCCA	4320
Oy	4321	GGGACAGGTGGTGGAGTTTGAACCCCAATCGGCTCTTGTGTCCAAACGACAGTCCCGATT	4380
Db	4321	GGGACAGGTGGTGGAGTTTGAACCCCAATCGGCTCTTGTGTCCAAACGACAGTCCCGATT	4380
Oy	4381	CTATGCCATGTTTGTCTGTCAGAGAACAAAGGTGCTGTCAAGGGCTACTCTCCCTGT	4440

Db 4381 CTAAGCATGTTTGGCTGCGACAGACAGACAGAGGCTGCTCAAGGCTGACTCCTCCTCT 4440
 QY 4441 TGACGAGAGTCTCTTTTCTTTTAAAGCATTTGCCATTTCCCTGCGGCGGCGCCCTTTCATC 4500
 Db 4441 TGACGAGAGTCTCTTTTCTTTTAAAGCATTTGCCATTTCCCTGCGGCGGCGCCCTTTCATC 4500
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RESULT 2

US-09-001-273-1
 ; Sequence 1, Application US/09001273
 ; Patent No. 5994130
 ; GENERAL INFORMATION:
 ; APPLICANT: SHYUAN, Andrew
 ; TITLE OF INVENTION: NOVEL MULTIDRUG RESISTANCE-ASSOCIATED
 ; TITLE OF INVENTION: POLYPEPTIDE
 ; NUMBER OF SEQUENCES: 8
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Testa, Hurwitz & Thibault
 ; STREET: 125 High St.
 ; CITY: Boston
 ; STATE: MA
 ; COUNTRY: USA
 ; ZIP: 02110
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: PatentIn Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/09/001,273
 ; FILING DATE:
 ; CLASSIFICATION:
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: FENTON, Gillian M
 ; REGISTRATION NUMBER: 36,508
 ; REFERENCE/DOCKET NUMBER: MIL-001
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (617) 248-7000
 ; TELEFAX: (617) 248-7100
 ; INFORMATION FOR SEQ ID NO: 1:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 4781 base pairs
 ; TYPE: nucleic acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; FEATURE:
 ; NAME/KEY: CDS
 ; LOCATION: 2..4360
 ; US-09-001-273-1

Query Match 98.5%; Score 4775.4; DB 2; Length 4781;
 Best Local Similarity 99.8%; Pred. No. 0;
 Matches 4773; Conservative 6; Mismatches 2; Indels 0; Gaps 0;

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 Db 1 TGAATGAAACTATACAGTGTGTGAGCCCTGGAACTTCACCTCAGAGAGATGAGATAT 60
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Db 4261 GGTGGTGAAGTTTGAACCCCATGCGTCTTCTGTCCAAAGCAATTCCTATATGC 4320
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QY 4807 TGTGCTAAAAAAGGCGGCGCCG 4847
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RESULT 3
US-08-843-459A-1
: Sequence 1, Application US/08843459A
: Patent No. 6162616
: GENERAL INFORMATION:
: APPLICANT: SHYJAN, Andrew
: TITLE OF INVENTION: NOVEL MULTIDRUG RESISTANCE-ASSOCIATED
: TITLE OF INVENTION: POLYPEPTIDE
: NUMBER OF SEQUENCES: 8
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: LAHIVE & COCKFIELD, LLP
: STREET: 28 State Street
: CITY: Boston
: STATE: Massachusetts
: COUNTRY: USA
: ZIP: 02109
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: COMPUTER: IBM PC compatible
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: Patentln Release #1.0, Version #1.30
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/843,459A
: FILING DATE: 16-Apr-1997
: CLASSIFICATION: 536
: ATTORNEY/AGENT INFORMATION:
: NAME: Hanley, Elizabeth A.
: REGISTRATION NUMBER: 33,505
: REFERENCE/DOCKET NUMBER: NNI-056 (formerly MIL-001)
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: (617)227-7400
: TELEFAX: (617)742-4214
: INFORMATION FOR SEQ ID NO: 1:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 4781 base pairs
: TYPE: nucleic acid
: STRANDEDNESS: single
: TOPOLOGY: linear

FEATURE:
NAME/KEY: CDS
LOCATION: 2..4360
US-08-843-459A-1

Query Match 98.5%; Score 4775.4; DB 4; Length 4781;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 4773; Conservative 6; Mismatches 2; Indels 0; Gaps 0;

QY 67 TGATGTGAAACTAAGCTGTGTGAGCCCTGGAACCTCCACTCAGAGAAGATGAAGATAT 126
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DB 1981 GTTTGGAGAGATATGATGAGAAAGATCAACTCTGTGCTGAACAGCTGTGCTGAG 2040

QY 2107 GCGTACCTGGCCATTCTTCCAGCAGGACCTGACGGAGATTGGAGAGGAGCCAA 2166
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Db 2221 CAATAGTGTATCCGGAACATCTCAAGTCCAGAGAGTTCGTTGTATACCCACAGT 2280
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Db 2281 ACAGTACCTGTTGACTGATGATGATGATCTTCATGAAAGAGGCTGATTACGGAAG 2340
QY 2407 AGGCACCATGAGAACTGATGATGATTAATGATGATGATGATGATGATGATGATGAT 2466
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QY 2467 GTTGTGGGAGAGACCGCCAGTGTGATGATGATGATGATGATGATGATGATGATGAT 2526
Db 2401 GTTGTGGGAGAGACCGCCAGTGTGATGATGATGATGATGATGATGATGATGATGAT 2460
QY 2527 GAAGAGTGTACAGAGAGAGGCTCTAAAGAGATCAATTAAGAGAGAGAGAGAGAGTAA 2586
Db 2461 GAAGAGTGTACAGAGAGAGGCTCTAAAGAGATCAATTAAGAGAGAGAGAGAGTAA 2520
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Db 2521 GCCAGAGAGAGGCGAGCTTGTGACGTGGAAGAGAGAGAGAGAGGCTGAGTCCCTG 2580
QY 2647 AGTATAGTGTCTATACCTGAGGCTGCTGGGGCCCTTGGCATTCCTGTTATATGAGC 2706
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Db 2641 CCTTTCATGCTGATGTAGGACAGCCGCTTCAGACCTGCTGTTGATGATGATGAT 2700
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QY 2947 CTCCCGGTGATGACGAGCTTTTCCGAGAGATCTTCGAAGCCCTATGAGAGTTTGA 3006
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 Db 4741 TGTGCTAAAAAAGGCGGCCGCC 4781
 RESULT 4
 US-08-463-092B-3
 ; Sequence 3, Application US/08463092B
 ; Patent No. 5766880
 ; GENERAL INFORMATION:
 ; APPLICANT: Cole, Susan P.C.
 ; APPLICANT: Deleay, Roger G.
 ; TITLE OF INVENTION: ISOLATED NUCLEIC ACID MOLECULES ENCODING
 ; TITLE OF INVENTION: MULTIDRUG RESISTANCE PROTEINS
 ; NUMBER OF SEQUENCES: 9
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: PARROE RESEARCH & DEVELOPMENT INNOVATIONS
 ; STREET: Queen's University at Kingston
 ; CITY: Kingston
 ; STATE: Ontario
 ; COUNTRY: CANADA
 ; ZIP: K7L 3N6
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: ASCII text
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/463,092B
 ; FILING DATE: 05-JUN-1995
 ; CLASSIFICATION: 435
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: 07/966,923
 ; FILING DATE: 27-OCT-1992
 ; CLASSIFICATION: 435
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: 08/029,340
 ; FILING DATE: 8-MAR-1993
 ; CLASSIFICATION: 435

; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: 08/141,893
 ; FILING DATE: 26-OCT-1993
 ; CLASSIFICATION: 435
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: 08/407,207
 ; FILING DATE: 20-MAR-1995
 ; CLASSIFICATION: 435
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Steeg, Carol Miernicki
 ; REGISTRATION NUMBER: 39,539
 ; REFERENCE/DOCKET NUMBER: Q1546
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (613) 545-2342
 ; TELEFAX: (613) 545-6853
 ; INFORMATION FOR SEQ ID NO: 3:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 5011 base pairs
 ; TYPE: nucleic acid
 ; STRANDEDNESS: double
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: cDNA
 ; FEATURE:
 ; NAME/KEY: CDS
 ; LOCATION: 196..4788
 ; US-08-463-092B-3
 Query Match 10.5%; Score 511.2; DB 1; Length 5011;
 Best Local Similarity 52.5%; Pred. No. 7,6e-123;
 Matches 1367; Conservative 0; Mismatches 1178; Indels 59; Gaps 9;
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QY 3677 CCCCAGAGGAGAGAGTACCTTTGAGAACGAGAGATGAGTACCGAGAAACCTCTCT 3736
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RESULT 5
US-08-462-109A-3
Sequence 3, Application US/08462109A
Patent No. 5882875
GENERAL INFORMATION:
APPLICANT: Cole, Susan P. C.
APPLICANT: Dealey, Roger G.
TITLE OF INVENTION: METHODS FOR IDENTIFYING
MULTIDRUG RESISTANT TUMOR CELLS
NUMBER OF SEQUENCES: 6

CORRESPONDENCE ADDRESS:
ADDRESSEE: LAHIVE & COCKFIELD
STREET: 60 State Street, suite 510
CITY: Boston
STATE: Massachusetts
COUNTRY: USA
ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: ASCII text
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/462,109A
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/966,923
FILING DATE: 27-OCT-1992
APPLICATION NUMBER: 08/029,340
FILING DATE: 8-MAR-1993
APPLICATION NUMBER: 08/141,893
FILING DATE: 26-OCT-1993
APPLICATION NUMBER: 08/407,207
FILING DATE: 20-MAR-1995
ATTORNEY/AGENT INFORMATION:
NAME: DeConti, Giulio A. Jr.
REGISTRATION NUMBER: 31,503
REFERENCE/DOCKET NUMBER: POI-002CP4
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 227-7400
TELEFAX: (617) 227-5941
INFORMATION FOR SEQ. ID NO.: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 5011 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: cDNA
FEATURE:
NAME/KEY: CDS
LOCATION: 196..4788
US-08-462-109A-3

Query Match 10.5%; Score 511.2; DB 2; Length 5011;
Best Local Similarity 52.5%; Pred. No. 7.6e-123;
Matches 1367; Conservative 0; Mismatches 1178; Indels 59; Gaps 9;

QY 1811 CACATCCACTGGGCCACCTGGCCCTTACAGAGACACTGCACAGCATCGATCGGAATC 1870
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QY 2957 CATTGAGAGCTTTTTCGAGAGATCTTGAAGCCCTATGAAGTTTGTGACAGACCC 3016
DB 3340 CACGTGAGCTTGTGACAGATCTTCCGCTGACCCATGAGCTTCTTGTGAGCGGACCC 3399
QY 3017 ACAGGAGAGATTTTCAACAGGTTTCAAGAGACATGATGATGATGATGATGATGATGATG 3076
DB 3400 AGTGGAGACCTGGTGAACCCCTTCTCAAGAGAGTGAACAGAGGACTCCATGATCCG 3459
QY 3077 TTCAGAGCAGATGTTTCAATCCAGAAAGTATCTCTGTTCTTCTGTGGGAATGAT 3136
DB 3460 GAGGTATCAAGATGTTTCAATGAGGCTCTCTTCAAGCTCATGATGATGATGATGATG 3519
QY 3137 GAGAGATCTTCCCGGTGCTTGTGGAGTGGGCGCCCTTGTGATCTCTTTTACGTC 3196
DB 3520 CTGCTGGCAGCGCCATCGCGGCTGATCATCCCGCCCTTGGCCATCTACTCTCT 3579
QY 3197 CTGACATTTCTTCCAGAGGCTGATTCGGGAGCTGAGAGGCTGAGCAATATACCCAG 3256

Db 3580 GTCCAGAGGTTCTAGTGGCTTCCCTCCCGAGCTGTAAGCGGCTGAGTCCAGCCCG 3639
QY 3257 TCACCTTCTCTCCACATCAGTCCAGATACAGAGGCTTCCACATCCAGCTTAC 3316
Db 3640 TCCCGGCTTATTCATTCACAGAGCTTCTGCGGGGTACGGTCAATTCAGCTTC 3699
QY 3317 AATAAGGGCAGAGTTTCTGACAGATACAGAGCTGCTGGTGTACACCAAGCTCT 3376
Db 3700 GAGGAGCAGAGAGCGCTTATTCACAGAGTACCTGAAGGTGACAGAGACAGAGCC 3759
QY 3377 TTTTGTGTGTACGTGTCGAGTGGGTGCTGCTGTCGCGCTGAGCTTCAATCAGCATC 3436
Db 3760 TATTACCCAGATCGTGGCCCAAGAGTGGCTGGCGCTGAGAGTGTGGGCAAC 3819
QY 3437 GCCCTATCACCACAGGGGGGTGATGATCTTTATGACAGGCAAGATTCCCGACCC 3496
Db 3820 TGCATCGTCTGTTTGCAGCCCTGTTGCGGTGATCTCAGGCAAGCTCAGTCTGGC 3879
QY 3497 TATGCGGCTTCCGCTTATGCTGTCAGTTACGGGGCTTCCAGTTTACGGTC 3556
Db 3880 TTGGTGGGCTCTCAGTGTCTTACTCATTCAGTGCACACTGACTTGAATGCGTGGT 3939
QY 3557 AGACTGCATCTGAGACAGAGCTGATTCACCTGCTGAGAGATCAATCACTACAT 3616
Db 3940 CGGATGTCTGAAATGAAACCAACATCGTGGCCGTGGAGAGCTCAAGAGATTTCA 3999
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Db 4000 GAGACTGAGAA--GGAGGCGCTGCGCAAAATCCAGAGACAGCTCCCGCCAGCAGCTGG 4056
QY 3677 CCCCAGAGGAGAGAGTACCTTTGAGAACGAGATGAGTACGAGAAACCTCCCT 3736
Db 4057 CCCCAGTGGGCGGAGTGGATTCGGAACACTACTGCTGCGCTACCGAGAGAGCTGGAC 4116
QY 3737 CTGCTCTAAAGAAATCTCTTACGATCAAACTTAAGAGAAATTTGGCATTTGGGG 3796
Db 4117 TTCTGTTCTCAGACATCATGATGATGATGAGGAGGAGAAAGTGGCATCTGGGG 4176
QY 3797 CGGACAGATCAGGAGTCCCTCGCTGGGAGTGGGCTTCCCTGCTGCTGATTAATCT 3856
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QY 3857 GGAGCTGATCAAGATGATGAGTGAATGATGATTTGGGCTTCCGCACTCCGA 3916
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QY 3917 AGCAACTCTTATCATCTCTCAAGAGCGGTGCTGTTCACTGATGATGATCAAT 3976
Db 4297 TTCAAGATCACCATCATCCCGAGACCTGTTTGTGTTGGGTTCCCTCCGATGAAC 4356
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QY 4097 GATTAATCTTCTAGTGGGGAAGCGAGCTTGTGATAGTGTAGAGCCCTGCTCCGAC 4156
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Db 4717 TACGGGCGCCCATCGGACCTCTG 4740

RESULT 6
US-08-460-907B-3
; Sequence 3, Application US/08460907B
; Patent No. 5891724
; GENERAL INFORMATION:
; APPLICANT: Dealey, Roger G.
; APPLICANT: Cole, Susan P.C.
; TITLE OF INVENTION: METHODS FOR CONFERRING MULTIDRUG
; TITLE OF INVENTION: RESISTANCE ON A CELL
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PARTEQ RESEARCH & DEVELOPMENT INNOVATIONS
; STREET: Queen's University at Kingston
; CITY: Kingston
; STATE: Ontario
; COUNTRY: CANADA
; ZIP: K7L 3N6
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: ASCII text
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/460,907B
; FILING DATE: 05-JUN-1995
; CLASSIFICATION: 424
; PRIORITY APPLICATION DATA:
; APPLICATION NUMBER: 07/966,923
; FILING DATE: 27-OCT-1992
; CLASSIFICATION: 424
; PRIORITY APPLICATION DATA:
; APPLICATION NUMBER: 08/029,340
; FILING DATE: 8-MAR-1993
; CLASSIFICATION: 424
; PRIORITY APPLICATION DATA:
; APPLICATION NUMBER: 08/141,893
; FILING DATE: 26-OCT-1993
; CLASSIFICATION: 424
; PRIORITY APPLICATION DATA:
; APPLICATION NUMBER: 08/407,207
; FILING DATE: 20-MAR-1995
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: Steeg, Carol Miernicki
; REGISTRATION NUMBER: 39,539
; REFERENCE/DOCKET NUMBER: 01551
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (613) 545-2342
; TELEFAX: (613) 545-6853
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 5011 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 196..4788
; US-08-460-907B-3

Query Match 10.5%; Score 511.2; DB 2; Length 5011;
Best Local Similarity 52.5%; Pred. No. 7.6e-123;
Matches 1367; Conservative 0; Mismatches 1178; Indels 59; Gaps 9;

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QY	1871	CAGAAGGGTAAACCTGGTGGGAATCTCGCGGAGTGTGGGAAGTGGAAAAACCTCTCAT	1930
Db	2200	CCCCAGAGTGTCTTGGTGGCCCGGTGGGGCCAGAGTGGGCTGGGAAAGTGTCTCTGCTC	2259
QY	1931	TCAGCCATTTTAAAGCCAGATGACGCTTCTTCAAGGGGAGCATTTGCATAGTGAACCTTC	1990
Db	2260	TCAGCCCTTTGGGTGGATGATGACAAAGTGGAGGGGACAGTGGCATACAGGGCTCCGTG	2319
QY	1991	GCTTATGTGGCCCGACAGGCGCTTGGATCTTCATCTACTCTGAGACACATCTCTTT	2050
Db	2320	GCTATTTGTGGCACAGGAGCGCTTGATTCAGAAATGATTTCTCCAGAAAAACATCTTTT	2379
QY	2051	GGGAAGGAATATGATGGAAGAAATCAACTCTGTGTCGAACAGCTGCTGAGGCGT	2110
Db	2380	GGATGTACGCTGGAGGAACCATTTTCAGAGTCCGTATACAGGCTGTGCTCCCTCCCA	2439
QY	2111	GACCTGGCCATTTCTTCCACAGCAGCATCGAGGATGGAGGAGCGAGAGCCACCTG	2170
Db	2440	GACCTGGAAATCTCGCCCACTGGGGATTCGGACACAGATTTGGGAGAAAGGCGTGAACCTG	2499
QY	2171	AGCGGTGGCAGCGCCAGAGATCAGCCTTGCCCGGGCTTGTATAGTACAGAGCATC	2230
Db	2500	TCTTGGGGAGACAGAGAGCGCGTGAACCTGGCCGGGCGGTACTCCACGCTGAACAT	2559
QY	2231	TACATCTCGACACACCCCTCACTGCTTATAGATGCCCATGTGGGACACATCTTCAT	2290
Db	2560	TACCTCTTCATGATATCCCTCTCAGACAGTGAATGCCCATGTGGGAAAAACATCTTTGAA	2619
QY	2291	AGTGTAT-----CCGGAACATCTCCAGTCCACAGACAGTTCGTATTGATACCACAG	2344
Db	2620	AATGTGATTTGGCCCCCAAGGGGATGCTGGAAGAACAGAGCGGATCTTGTACCGCACGC	2679
QY	2345	TTACAGTACCTGTGTAGCTGTGATGAAGTATCTTCATGAAGAGGCGTATTAACGGA	2404
Db	2680	ATGAGCTATTCGCCGAGGAGGAGCGTCAATCGTATGATAGGGGGAGCATGCTGAG	2739
QY	2405	AGAGGACCCCATGAGGAATGATTTAAATGGTGAATGTCTACCATTTTAAATPAC	2464
Db	2740	ATGGGCTCTCCACAGAGAGCTGCTGCTCGACAGCGGCGCTTCGCTGAATCTCTCGTAC	2799
QY	2465	CTGTGGTGGGAGAGACACCGCCATGT---GAGATCAATTTCAAAAAGAAACCAACG	2521
Db	2800	TATGCCACGACACAGCAGCAGGAGTGCAGAGAGAAAGGGGCTTACGGCGCTCAGCGGT	2859
QY	2522	TCACAGAGAAGTCCACAAAGCAAG-----GTCTTAAACAGGATCAATTAAGAAG	2573
Db	2860	CCAGGAGGAAGCAAAAGCAAAATGGAGATGTGGCATGTGTGAGGACATGACAGGGAAG	2919
QY	2574	AAAAAGAGTAAAGCCAGAGGAAGGGCACTTGTGACGTG-----	2615
Db	2920	CAATGTGAGAGCAAGTCCACAGCACTCTCTCTATAGGGGACATCAGCAGGCACCAC	2979
QY	2616	AAGAGAAAGGGCAGGCTGATCCCTGTGTCAGTATATGATGTCTACATCCAGGCTG	2675
Db	2980	AACGACACCGCAACATCTGCAAAAGCTGAGGCGCCAAAGAGAGAGACTCGAAGCTGATG	3039
QY	2676	GGGGC-----CCCTTGGCATCTCGTTATTATGGCCCTTTTCATCTCAATGTAGGC	2728
Db	3040	GAGGCTGACAAAGCGCAGACAGGCGAGTCAAGAGCTTTCGTTACTGGGACTACATAGAG	3099
QY	2729	AGCAGCCGCTTCAGCACCTGTGTGTGATTTACTGTGATCAGCAAGGAAGCGGACACC	2788
Db	3100	GCCATGGGACCTTTCATCTCTTCACACATCTTCTTTCACTGTACATGATGTGCC	3159
QY	2789	ACTGTGACT-----CGAGGAGAAAGAGCACTCGGTGAGAGAGCATGAAGCAATCT	2842
Db	3160	GGCGTGGCTTCCAACTATTTGTGCTCAGGCTCTGTGACTGATGACCCCATGTCAAGGGGACT	3219
QY	2843	CATATGCACTATATGCCAGCATTTACGCCCTCTCATATGGCAGTCACTGATCTGTAAA	2902

Db	3220	CAGAGCACACGAAAGTCGCGCTGAGGCTGTATGAGACCCTGGGCAATTTCCACAGAGGATC	3275
OY	2903	GCCATTTGAGG-----AGTTGCTTTGTTCAAGGGACGGGTGGACCTCTCCGGGCTG	2955
Db	3280	GCCGCTTTGGCTACTCCTCATGCGCGTGTCCATGCGGGGGATCTTGCTTCCCGCTGTCTG	3333
OY	2957	CATGACGACTTTTCCGAGGATTCCTTCGAAGCCCTATGAACTTTTTCAGACGACCCC	3018
Db	3340	CACGTGACACTGCTGACAGAGATTCCTGGGTCAACCCATGAGCTTTTTCAGGGACCCCG	3399
OY	3017	ACAGGAGGATTTCTAACAGGTTTTCGAAAGACATGAGTGAAGTTAGCTGGGCTCCG	3078
Db	3400	AGTGGAACTCGGTGAAACCGCTTCTCCAAAGACGTGACACAGATGACATCCATGATCCCG	3459
OY	3077	TTCCAGGCCGAGATTTTCATCCAGAAAGTTATCTGGTGTCTTCTGTGTGGAAATGATC	3138
Db	3460	GAGGTTCATCAAGATTTTCATGGGCTCCCTGTTCAACGTATTTGGTCCGTCATCGTTATTC	3519
OY	3137	GCAGAGCTCTCCCGTGGTTCTTTGAGGACGTGGGGCCCTTGTCTATCTCTTTTCAGTC	3198
Db	3520	CTGCTGGCCACGCCCATCGCGGCATCATCCGCCCTTGGCTCATCTACTTCTTC	3579
OY	3197	CTGCACATTTGTTCCAGAGGTCTGATTCGGGAGCTGAAGCGTCTGGACATATACGACGAG	3256
Db	3580	CTCCAGAGTTCTACGTGGCTCTCCCGGACCTGAAGCGCTCGAGTCCGTGACGCCG	3639
OY	3257	TCACCTTTCTCTCCCATCATCAGTCTCAGATACAGGGCTTGGCACCATCCACCCCTAC	3318
Db	3640	TCGCCGCTCATTTCCCTTTCAACAGAACCTTCTCGGGGGTCAAGCTCTTTGACAGCTTTC	3699
OY	3317	AATAAAGGCGAGGATTTCTGCACAGATACACAGACCTCGTGGATACACCAACAGCTCT	3378
Db	3700	GAGAGCAGGAGCGCTTCTATCCACAGAGTGACCTTAAGTGGACGACAGACCAAGAGCC	3755
OY	3377	TTTTTTTGTTTACGTGTGCGATGCGGTGCTGGCTGTGCGGCTGACCTCATACGATC	3438
Db	3760	TATTACCCACACATCGTGCGCAACAGGTGCTGGCGGTGGATGATGTGGGCAAC	3819
OY	3437	GCCCTCATCACACCACGGGGGTGATGATGCTGTTATGACAGGGGACATTTCCCCAGC	3498
Db	3820	TGCATCGTTCTGTTTGTCTGCCCTGTTTGGCGTATCTCCAGGACACAGCTCTGATCTGGC	3879
OY	3497	TATCGGGGTCTCGCATCTCTTATATGCTGTGCAGTTTAACGGGGCTGTTCAGTTTACGGTC	3556
Db	3880	TTGGTGGGCTCTAGTGTCTTACTATTCACAGGTACACAGTACTTGAACCTGGCTGGTT	3939
OY	3557	AGACTGGCATCTGAGACAGAGCTCGATTCACCTCGGTGGAGAGATCATCATCATTT	3618
Db	3940	CGGATGTCATCTGAATATGGAACCAACATGTCGGCTGGAGGGCTCAAGGATTTTCA	3999
OY	3617	AAGACTCTCTCTTGGAGAGCACTGCCAGATTTAAGAACAGGCTCCCTCCTACTGG	3678
Db	4000	GAGACTGTGAAA--GAGAGGGCCCTGGCAATTCAGAGACAGCTCCCGCCAGCAGCTGG	4056
OY	3677	CCCCAGGAGGAGAGGTGACCTTTTGAAGCGCAGATGAGGTACCGAGAAAACCTCCCT	3738
Db	4057	CCCCAGGTGGGCGAGTGGAAATTCGGAATCTACTGCTCGCTACCGAGAGGACCTTGGAC	4118
OY	3737	CTCTGCTTAAAGAAAGTATCTTACAGATCAAACTTAAAGAGAGATTGGCATTTTGGGG	3798
Db	4117	TTTGCTTCAAGGCACATCATTTGTCAGATCAATATGGGGAGAAAAGTGGCATGTGTGGG	4178
OY	3797	CGGACAGGATCAGGGAAGTCTCGCTGGGGATGGCCCTTCTCCGCTGTGGTGAATATCT	3856
Db	4177	CGGACGGGAGGTGGGAAGTGTCTCCGACCTGGGGCTTTATTCGGATCAACAGCTTCCG	4236
OY	3857	GGAGGCTGCATCAAGATTGATGAGAGTGAAGTATGATGATTTGGGCTTGGCAGACTCCGA	3918
Db	4237	GAAAGAGATCATCATCTGATGGCATCAACATTCGCCAAGATGGGCTTGACAGACTTCCCG	4286
OY	3917	AGCAAACTCTCTATCATTTCTCTCAAGACGGGTGCTGTCACTGGCACTGTCAGATCAAT	3978

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Db 4297 TTCAAGATCCACATCATCCCGGAGACCTGTTTGTTCGGGTTCCCTCCGAATGAAC 4356
Oy 3977 TTGAACCCCTTTCAGACGATGAGACGAGATTGGGATGCCCTGGAGAGACACAC 4036
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Db 4417 CTGAAGGACTTGCTGACAGCCCTTCTGACAGCTAGACATGAATGTGCAGAGGCGG 4476
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Oy 4217 ATTCAAGAGACCATCCGAGAACATTTGACAGCTGATCATCTGACATTCCTCCATCG 4276
Db 4597 ATCCAGTCCACCATCCGAGACAGTTCGAGGACTGACCGCTCTCACCATCGCCCGG 4656
Oy 4277 CTGCACAGGTTCTAGGCTCCGATAGATTATGTGCTGGCCGAGGAGACAGGTGGAG 4336
Db 4657 CTCAACACCATCATGAGACTACACAAGGATGATGCTTGGACAAAGAGAAATCCAGGAG 4716
Oy 4337 TTTGACCCCATCGGCTCTCTG 4360
Db 4717 TACGGCCGCCCATCGGACCTCTG 4740

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RESULT 7

US-08-463-179A-3

Sequence 3, Application US/08463179A

Patent No. 6001563

GENERAL INFORMATION:

APPLICANT: Cole, Susan P.C.

APPLICANT: Dealey, Roger G.

TITLE OF INVENTION: METHODS FOR IDENTIFYING CHEMOSENSITIZERS

NUMBER OF SEQUENCES: 6

CORRESPONDENCE ADDRESS:

ADDRESSEE: LAHIVE & COCKFIELD

STREET: 60 State Street, suite 510

CITY: Boston

STATE: Massachusetts

COUNTRY: USA

ZIP: 02109

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: ASCII text

CURRENT APPLICATION NUMBER: US/08/463, 179A

FILING DATE:

CLASSIFICATION: 536

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 07/966, 923

FILING DATE: 27-OCT-1992

APPLICATION NUMBER: 08/029, 340

FILING DATE: 8-MAR-1993

APPLICATION NUMBER: 08/141, 893

FILING DATE: 26-OCT-1993

APPLICATION NUMBER: 08/407, 207

FILING DATE: 20-MAR-1995

ATTORNEY/AGENT INFORMATION:

NAME: Decont, Giulio A. Jr.

REGISTRATION NUMBER: 31,503

REFERENCE/DOCKET NUMBER: FOI-002CP8

TELECOMMUNICATION INFORMATION:

TELEPHONE: (617) 227-7400

TELEFAX: (617) 227-5941

INFORMATION FOR SEQ ID NO: 3:

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SEQUENCE CHARACTERISTICS:
LENGTH: 5011 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: CDNA
FEATURE:
NAME/KEY: CDS
LOCATION: 196..4788
US-08-463-179A-3

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Query Match          10.5%; Score 511.2; DB 3; Length 5011;
Best Local Similarity 52.5%; Pred. No. 7.6e-123;
Matches 1367; Conserved 0; Mismatches 1178; Indels 59; Gaps 9;

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Db 2440 GACCTGGAATTCCTGCCAGTGGGATGGAGAGATGGGAGAGGCGCTGAACCTG 2499
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Oy 2345 TTACAGTACCTGTTGACTGTGATGAAGTATCTTCAATGAAGAGGCTGTATTACGGA 2404
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Db 2920 CAATCGACAGAGACAGCTGACGCTCCTCTCTATATGAGGACATCAGCAGGACAC 2979
Oy 2616 AAGAGAAAGGCGAGGTTCAAGTCCCTGTGCTAGTATATGTGTCTACATCAGGCTGCTG 2675

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Db 3340 CACGGGACCTGCTCACAAGCATCTCGGCTGATCCATGAGCTTTTGGAGGGACCC 3399
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QY 3137 GCAGAGTCTTCCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 3196
Db 3520 CTGCTGGGAGCCATCCATCCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 3579
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Db 4417 CTGAAGGACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 4476
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QY 4157 TGTAAATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 4216
Db 4537 ACGAAGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 4596
QY 4217 ATTCAAGAGACCATCGGAGAGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 4276
Db 4597 ATCCAGTCCACCATCCGAGACAGTTCGAGAGTCCGCTGCTGCTGCTGCTGCTGCTGCTG 4656
QY 4277 CTGACAGGCTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 4336
Db 4657 CTCAACACCATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 4716
QY 4337 TTGACACCCATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 4360
Db 4717 TACGGCGCCCATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 4740

RESULT 11
US-08-462-109A-1
Sequence 1, Application US/08462109A
Patent No. 5882875
GENERAL INFORMATION:
APPLICANT: Cole, Susan P. C.
APPLICANT: Dealey, Roger G.
TITLE OF INVENTION: METHODS FOR IDENTIFYING
TITLE OF INVENTION: MULTIDRUG RESISTANT TUMOR CELLS
NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
ADDRESSEE: LAHIVE & COCKFIELD
STREET: 60 State Street, suite 510
City: Boston
STATE: Massachusetts
COUNTRY: USA
ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: ASCII text
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/462,109A
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/966,923
FILING DATE: 27-OCT-1992
APPLICATION NUMBER: 08/029,340
FILING DATE: 8-MAR-1993
APPLICATION NUMBER: 08/141,893
FILING DATE: 26-OCT-1993
APPLICATION NUMBER: 08/407,207
FILING DATE: 20-MAR-1995
ATTORNEY/AGENT INFORMATION:
NAME: Deconlt, Giulio A. Jr.
REGISTRATION NUMBER: 31,503
REFERENCE/DOCKET NUMBER: PQI-002CP4
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 227-7400
TELEFAX: (617) 227-5941
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 5011 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: cDNA
FEATURE:

NAME/KEY: CDS
LOCATION: 196..4788
US-08-462-109A-1

Query Match 10.4%; Score 506.4; DB 2; Length 5011;
Best Local Similarity 52.4%; Pred. No. 1,3e-121;
Matches 1364; Conservative 0; Mismatches 1181; Indels 59; Gaps 9;

1811 CACATCCACCTGGGCCACCTGGCCCTTACAGAGACACTGCACAGCATCGATCTGGAGATC 1870
12142 CACATTCACCTGGGCCA--GGACGACCCCTCCACACTGATGACACTCCTTCCTCATC 2199
1871 CAAGAGGTAATGCTGGTGAATCTGGGAGTGTGGGAATGGAAAACCTTCATC 1930
2200 CCGGAGGTCCTTGGTGGTGGCCGTGGTGGGAGTGGGCTGGGAAAGTTGCTCCCTC 2259
1931 TCAGCCATTTTGAAGCAGATGACGCTTCTAGAGGAGCATTTGCATCAGTGAACCTTC 1990
2260 TCAGCCCTCTGGCTGAGATGACAAAGTGAAGGGGAGCTGGCTATCAGAGGCTCCGTG 2319
1991 GCTTATGTGGCCAGCAGGCTTGATCTCATCTACTTGAAGACAAATCTGTTT 2050
2320 GCTTATGTGGCCAGCAGGCTTGATCTCATCTACTTGAAGACAAATCTGTTT 2379
2051 GGGAGCAATATGATGAGAAAGATPACACTCTGTGCTGAAACAGCTGCTCGAGGCT 2110
2380 GATATCAGCTGAGAGAACCATATTACAGTCCGTGATACAGGCTGCTGCTCCCTCCA 2439
2111 GACCTGGCCTTCTTCCAGCAGCAGCAGCAGATTTGAGAGGAGGAGGCAACCTG 2170
2440 GACCTGGAATCTCCCGCAGTGGGATGCGAGATTTGGGAGAGGAGGCGTGAACCTG 2499
2171 AGCGTGGCAGCGCCAGAGATCACCCTTCCCGGCTTGTATAGTGAAGAGACATC 2230
2500 TCTGGGGAGCAGAGAGGCGGTGACCTGGCCGGGCTGTATCCAAACGCTGACAT 2559
2231 TACATCTGAGAGACCCCTCAGTGCCTTACATGCTGGGCAACCATCTTCAT 2290
2560 TACCTTGTGATGATCCCTCTCAGCAGTGGATGCTGATGAGGAGGAGGAGGAGGAG 2619
2291 AGTCTAT-----CCGGAACATCTCAAGTCCAGACAGTCTGTTTGTACCCACAG 2344
2620 AATGATTTGGCCCCCAAGGGGATGTGAAGAACAGCGGATCTTGTGTACGACAGC 2679
2345 TTAGAGTACCTGTTTACGTGTATGAGATTTTCAAGAGGCGCTGTATTACGAA 2404
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2405 AGAGGACCCATGAGGAGTGAATTTAAATGCTGATGATGCTACATCTTATTAAC 2464
2740 ATGGGCTCTTACAGAGGCTGCTGCTCGAGAGGCGCTTCGCTAGTTCCTGCGTACC 2799
2465 CTGTGCTGGAGAGACACCGCCAGTT---GAGATCAATTCAAAAAGAGAACAGTGT 2821
2800 TATGCCAGCAGAGCAGAGGAGATGCAAGAGAGGAGGCTCAACGGGCGTCAACGGT 2859
2522 TCACAGAAAGTCAACAAGCAAG-----GTCTTAACACGATCAATTAAGAGG 2873
2860 CAGGAGAAAGCAAGCAAGCAAGCAAGCAAGCAAGCAAGCAAGCAAGCAAGCAAG 2919
2574 AAAAAGCAGTAAAGCAGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 2615
2920 CAATCTCAGAGACAGTCAAGAGCTCTCTCTCTATATGAGGAGACATCAGAGGACAC 2979
2616 AAGAGAAAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 2675
2980 AACAGCAGCAGCAAGTCAAGAAAGTGAAGGCAAGAAAGAGAGAGAGAGAGAGAGG 3039
2676 GGGGC-----CCCTTGGCATCTCTGTTATTTATGAGGCTTTTCAATGCTGAATGAGG 2728
3040 GAGGCTGACAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 3099

2729 AGCAGCCCTTACAGCAGCTGGTGGTGTATGATTCAGCAAGAGGAGGAGAGC 2788
3100 GCCATGCGACTCTTCACT 3159
2789 ACTGTGACT-----CGAGGAAACGAGACCTCGGTGAGTGAACAGCATGAAGCAATCT 2842
3160 GCGGTGCTTCAACATATTGCTGCTGAGCTCTGAGCATGATGACCCATCTGTCACGGGAG 3219
2843 CATATGAGTACTATGCGCAGCATCTACGCTCTCTCTCTCTCTCTCTCTCTCTCTCT 2902
3220 CAGAGCAGCAGAAAGTCCGCGTGAAGCTGTATGAGAGCCCTGGGCTTTCACAGGATC 3279
2903 GCCATTCGAG-----AGTGTCTTGTGAAGGAGCAGGCTGAGGAGCTTCTCCGCTG 2956
3280 GCGGTGTTGGCTACTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 3339
2957 CATGACAGCTTTTCCAGAGATCTTGAAGCCCTTGAAGTTTGTGAACAGACCC 3016
3340 CAGGTGACCTGCTGACAGCATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 3399
3017 ACAGGAGATTTCTCAACAGCTTTTCAAGACATGATGATGATGATGATGATGATGAT 3076
3400 AGTGGAGACCTGTGAACCCCTTCTCCAGAGAGCTGACACAGTGAATGATCCG 3459
3077 TTCAGGCGAGATGTTTCAACAGCTTATCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 3136
3460 GAGTCAATCAAGATGTTATGAGGCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 3519
3137 GCAGAGATCTTCCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 3196
3520 CTGCTGCGCAGCGCATGCGCGCATGATCATCCGCTGCTGCTGCTGCTGCTGCTGCTGCT 3579
3197 CTGACATTTCTTCCAGAGTCTGATTTGCGAGCTGAAGCTGTCGCAATATCACGAG 3256
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3257 TCACTTCT 3316
3640 TCCCGCT 3699
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3700 GAGGAGAGGAGGAGGCTTCAATCAACAGAGTGAAGTGAAGGAGGAGGAGGAGGAGG 3759
3377 TTTTCTTCTTCT 3436
3760 TATTACCCAGCATCTGAGGCAACAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 3819
3437 GCGCTCATCCACACAGCGGCGTATGATGCTTCTTATGACGAGGAGATTTCCGCCAGCC 3496
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3497 TATGCGGCTCTGCT 3556
3880 TTGCTGCGCTCTCAAGTGTCTTACTATGTCAGAGTCAACAGTACTGAACTGGCTGTT 3939
3557 AGACTGCTATCTGAGACAGAGCTCGATTCACCTCGGTGAGAGGATCAATCACTACATT 3616
3940 CGGATGTCATCTGAATGGAACCAACATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 3999
3617 AAGACTGCTCTTGGAGAGCAGTGCAGAAATTAAGAAAGCAAGGCTCTCTCTCTCTCTCT 3676
4000 GAGACTGAGAA---GGAGGCGCTTGGCAATCCAGAGACAGCTGCGCCAGAGCTGG 4056
3677 CCCCAGGAGGAGAGGAGTGTGAGAAAGCAGAGATGAGTACCGAGAAACCTTCTCT 3736
4057 CCCCAGGAGGAGGAGGAGTGTGAGAAATTCGGAATCTACTGCTGCTGCTGCTGCTGCTG 4116
3737 CTGCTCTTAAAGAAATGATCTTCAAGATCAAACTTAAAGAAAGATGAGTGTGAGG 3796
4117 TTGCTTCTGAGGACATCAATGTCAGATCAAAAGGAGGAGGAGGAGGAGGAGGAGG 4176
3797 CGAGAGGATCAAGGAAAGTCTGCTGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 3856

Dh	4177	CGAGCGGAGCTGGGAAGTGTGCTCCAGCCCTGGGGCTTATTTCGGATCAACGAGTCTGCC	4236
Qy	3857	GGAGGCTGCAATCAAGATTGATGAGAGTGAAGATTCAGTATTTGGCTTCCGACCTCCGA	3916
Dh	4237	GAGGAGATGATCATCATCGATGAGCATCAACATCGCCCAAGATGGCTCGACAGCTCCGC	4286
Qy	3917	AGCAAACTGCTATCATTTCTCTCAAGACCGGGTGTTCAGTGGGCACTGTGATCAAT	3976
Dh	4297	TTCAAGATCAACATCATCCCCCGAGACCCGTGTTTGTGTTGGGGTTCCCTCGAATGAC	4356
Qy	3977	TTGGACCCCTTCAACCGATCACTGGAAGCAGATTTGGGATGCCCTGAGAGCAGAC	4036
Dh	4357	CTGAGCCCATTTACGCCAGTACTGTGATGAAGAAGTCTGGACGTCCCTGGAGTGGCCAC	4416
Qy	4037	ATGAAAGATGATTTATGCTCAGCTACTCTGAACCTTGATTCGAAGTGTGAGAGATGG	4096
Dh	4417	CTGAGGACCTTCTGTGTACGCCCTTCTTGACAAAGCTAGACCATGAAATGTGCAGAAAGCGGG	4476
Qy	4097	GATPACTTTCAGTGGGGGAACGGCAGCTTTGTGCATAGCTAGAGCCCTGCTCGCCAC	4156
Dh	4477	GAGAACTCCTAGTCTCGGGCAGCCCGCAGCTTGTGTGCTPAGCCCGGGCCCTGTGTGAGAG	4536
Qy	4157	TGTAAAGTCTGATTTTAAATGAAGCCACAGCTGCCATGAGACACAGACAGATTATG	4216
Dh	4537	ACGAAATGCTTGTGTGATGTAGGGCCACAGCCGCTGAGACTTGAAACCGAGACCTC	4596
Qy	4217	ATTCAAGAGACATCCGAGAGAGATTGTGAGACTGTACCATCTGACCATTGGCCCATGGC	4276
Dh	4597	ATCCAGTCCACATCCGGAGACAGATTCCGAGAGACTGACGCTCTCAACATGCCCCACGG	4656
Qy	4277	CTGCACACGCTTTAGAGCTCCGATAGAGATTATGTGTGGGCCCAAGAGCAGGTGATGAG	4336
Dh	4657	CTCAACACCATCATGTGACTACACAAAGGGTATCGTCTTGACAAAGGAGAAATCCAGAG	4716
Qy	4337	TTTGACACCCCATCGGCTCTCG 4360	
Dh	4717	TACGGCGCCCATCGGACCTCTCG 4740	

US-08-460-907B-1
 Sequence 1, Application US/08460907B
 Patent No. 5891724
 GENERAL INFORMATION:
 APPLICANT: Deeley, Roger G.
 APPLICANT: Cole, Susan P.C.
 TITLE OF INVENTION: METHODS FOR CONFERRING MULTIDrug
 TITLE OF INVENTION: RESISTANCE ON A CELL
 NUMBER OF SEQUENCES: 9
 CORRESPONDENCE ADDRESS: 1
 ADDRESSEE: PARKED RESEARCH & DEVELOPMENT INNOVATIONS
 STREET: queen's university at Kingston
 CITY: Kingston
 STATE: Ontario
 COUNTRY: CANADA
 ZIP: K7L 3N6
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: ASCII text
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/460,907B
 FILING DATE: 05-JUN-1995
 CLASSIFICATION: 424
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: 07/966,923
 FILING DATE: 27-OCT-1992
 CLASSIFICATION: 424
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: 08/029,340
 FILING DATE: 8-MAR-1993

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? CLASSIFICATION: 424
? PRIOR APPLICATION DATA:
? APPLICATION NUMBER: 08/141,893
? FILING DATE: 26-OCT-1993
? CLASSIFICATION: 424
? PRIOR APPLICATION DATA:
? APPLICATION NUMBER: 08/407,207
? FILING DATE: 20-MAR-1995
? CLASSIFICATION: 424
? ATTORNEY/AGENT INFORMATION:
? NAME: Steeg, Carol Miernicki
? REGISTRATION NUMBER: 39,539
? REFERENCE/DOCKET NUMBER: 01551
? TELECOMMUNICATION INFORMATION:
? TELEPHONE: (613) 545-2342
? TELEFAX: (613) 545-6853
? INFORMATION FOR SEQ ID NO: 1:
? SEQUENCE CHARACTERISTICS:
? LENGTH: 5011 base pairs
? TYPE: nucleic acid
? STRANDEDNESS: double
? TOPOLOGY: linear
? MOLECULE TYPE: cDNA
? FEATURE:
? NAME/KEY: CDS
? LOCATION: 196..4788
? IS-08-460-907B-1

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Query Match	10.4%	Score 506.4	DB 2	Length 5011
Best Local Similarity	52.4%	Pred. No. 1,36-121		
Matches 1364	Conservative	0	Mismatches 1181	Indels 59
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QY 2142	CACATTCACCTGGGCCA--GGAGCAGACCTCCACACTGATGGCATCACCTTCATC	2199		
Db				
QY 1871	CAGAGGGTAACTGGTTGGATCTGCGGCACTGGGGAAGTGGAAAAACCTCTCTCAT	1930		
Db				
QY 2200	CCCGAAGGTCCTTTGGTGGCGCGTGTGGGCGCAGGGGGCTCGGAAAGTGTCCCTGCTC	2259		
Db				
QY 1931	TCAGCCATTTTAAAGCCAGATGACGCTTTCAGAGGGCAGCATTCGATCAGTGAACCTTC	1990		
Db				
QY 2260	TCAGCCCTCTTGGCTGAGATGAGCAAAAGTGAGGGGACACGTGGCTATCAGAGGCTCCGTG	2319		
Db				
QY 1991	GCTTATGTGGCCAGCAGGCGCTGGATCTCTCAATGCTACTGTAGAGCAACATCTGTTT	2050		
Db				
QY 2320	GCTATGTGTCACAGAGGCGCTGGATTCAGATGATTTCTTCCGAGAAACATCTTTT	2379		
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QY 2051	GGCAAGGATATGATGAACAAAGATACAACTGTGGCTGAACACCTGCTGCGTAGGCGCT	2110		
Db				
QY 2380	GGATGTACACTGGAGSAAACCAATTACAGGTCCGTGATACAGGCTTGGCCCTCTCCCA	2439		
Db				
QY 2111	GACCTGGCCATTCCTCCACGACGACCTGACGGAGATTGGAGACGAGGCCAACCCTG	2170		
Db				
QY 2440	GACCTGGAAATCTCGCCCGAGTGGGATGGACAGAGATTGGCGAAGAGGCGTGAACCTG	2499		
Db				
QY 2171	AGGGGTGGGACGCGCAGAGGATCAAGCTTGGCCCGGCGCTTGTATAGTGACAGGAGATC	2230		
Db				
QY 2500	TCGTGGGGGACAAACACAGGCGCTGAGCTCGGCCGGGCGGTACTCCAAACGCTGCATTT	2559		
Db				
QY 2231	TACATCTGTGAGACCCCCCTCAGTCCCTTAATGATGCCATGTGGGCAACACATCTTCAT	2290		
Db				
QY 2560	TACCTTTCGATGATCCCTCTCAGCAGTGGATGCGCATGTGGGAAACACATCTTTGAA	2619		
Db				
QY 2291	AGTGCAT-----CCGGAACATCTCAAGTCCAAGACAGTTCTGTTTGTATACCCACAG	2344		
Db				
QY 2620	AATGTGATGGGCCCAAGGGGATGCTGAAGAACAAAGCGGAGATCTTGGTCAACGACACAG	2679		
Db				
QY 2345	TTACAGTACTCTGGTTGACTGTGATGSAAGTATCTTCAATGAAGAGGGCTGTATTACGGAA	2404		
Db				
QY 2680	ATGAGCTACTTTCGCCAGGTGAGAGCTATCATCTCTCATAGTGGCGCAGAGATCTCTGAG	2739		
Db				

OY	2405	ACAGCACCCTATGAGGAAACGATGAATTAATTAAATGAGACTATACCTACCAATTTTATATAC	2466
Db	2740	ATGGGCTCTTTCACAGAGACTGTGGCTCGAGAGGGGGCTTGCTAGTTTCTGGCTAC	2799
OY	2465	CTGTGCTGGGAGAGACACCGCCAGTT---GAGATCAATTCAAAAAGGAACAGTGT	2522
Db	2800	TATGCCACACAGAGCAGAGACAGATGCGAGAGAGAACGGGGTCAAGGGCTCACGGCT	2855
OY	2522	TCACAGAAGATCAAGACAAAGC-----GTCCTAAACAGGATCAATTAAGAG	2573
Db	2860	CCAGGGAAGGAAGCAAAAGTAATGGAATGCGATCTGGTACGGACAGTGCAGGAG	2919
OY	2574	AAAAAGCATTAAACCAGAGAGAAAGGACGTTGTGACGTG-----	2615
Db	2920	CAACTGCAGACAGACGTCACACAGCTCTCTCTCTATAGGGGACATCAGAGCACAC	2979
OY	2616	AAGAGAAAGGCGAGGGTTCAGTGCCCTGGGCACTATATGCTGTCAATCCAGGGCTGT	2675
Db	2980	AMCAGCACCGCAGACTCGAAAAAGCTGAGGCCAABAAGAGAGACCTCGAAGCTGATG	3039
OY	2676	GGGG-----CCCTGGCAATTCGTGTTATATGAGCCCTTTCAATGCTGAATGAAGC	2728
Db	3040	GAGGCTGCAGAGGGCGAGACAGGCGAGGTCAGACTTTCCGTGTACGGGACTACATGA	3099
OY	2729	AGCACCGCTTTCAGCACCCTGTGTGTAGTTACTGATTAAGCAGAGAGCGGAGAAC	2788
Db	3100	GCCATCGGACTTTTCATCTCTCTTCACAGATCTTCCTTTATGTATGTAACCATGTGTC	3159
OY	2789	ACTGTGACT-----CGAGGGAACGAGACCTCGGTGAGACAGCATGAAGACATCT	2842
Db	3160	GGCGTGGCTTCCAACTATTGGCTCAGCTCTGTGACTGATGACCCCACTGTCAACGGACT	3219
OY	2843	CATATGACTACTATGCCACATCTACGCCCTTCCATGGCAGTCACTGATCTGTGAA	2902
Db	3220	CAGAGACACAGAAAGTCGGGCTGAGGTCATGAGACCCCTGGGACTTTTCAAGAGATC	3279
OY	2903	GGCAATTGGAG-----AGTTGTCTTTGTCAAGGGCAGCCTCGAGCTCTCCCGGTG	2956
Db	3280	GCCGTGTTGGCTACTCCAAATGGCCGTGTCCATCGGGGGGATCTTGGCTCCCGCTGTCT	3339
OY	2957	CATGACGAGCTTTTCCGAGAGATCTTCGAAAGCCCTATAGCTTTTGTGACAGACCC	3016
Db	3340	CACGTGGACCTCGCTGACACACATCTTGGGTACCCATAGCTTTTGAAGCGACCCC	3399
OY	3017	ACAGGAGAGATTCTCAACAGGTTTCCAAAGACATGATGAAGTTGAGTGGGCGCTCG	3076
Db	3400	AGTGGAAACCGTGGAAACCGCTTCCAAAGAGAGCTGACAGAGTGAATCATATGCCG	3459
OY	3077	TTCCAGGCCGAGATGTTCAATCCAGAAAGCTTATCTGTGTTCTTCTGTGTGGAAATGAT	3136
Db	3460	GAGGTCAATCAAGATGTTTCATGAGGCTCCCTGTTCACAGTCATGTGGCTGCATCGTAT	3519
OY	3137	GCAGAGACTTCCCGGTGGTTCCTGTGGCAGAGAGGGGCCCTGTATCTCTTTCAATC	3186
Db	3520	CTGTGGCCACAGCCCATCGCCGCCCATATCATCCGCCCTTGGCTATCTACTTCTTC	3579
OY	3197	CTGCACATTGTCTCCAGGGGTCTGATTGGGAGCTGAACGCTGTGGAATAATCAACGAG	3256
Db	3580	GTCACAGAGGTTCTACGCGGCTTCTCCCGGACAGCTAAGCGGCTGAGATCGTAGCCG	3639
OY	3257	TCACCTTCTCTTCCACATACAGTCCAGCATACAGGGCTTTCACACATCCAGCCTTAC	3316
Db	3640	TCGCCGGGTATTTCTTTCATTTTCAACGAGACCTGTGCGGGGTGAGGTATTCAGAGCTTC	3699
OY	3317	AATTAAGGAGAGAGTTTCTGCAACAGATTAACGAGAGCTGCTGATGACACCAAGCTCT	3376
Db	3700	GAGAGCAGAGAGCGCTTCAATCCACAGAGTGAATGATGAGAGACCAAGAGGCG	3759
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Db	3760	TATTACCCACAGCATCGTGGCCAAACAGTGGTGGCGCTGGAGATGTGTGGGCAAC	3819
OY	3437	GCCCTCATCACACACAGGGGCTGATGATGCTTTATGCACGGCAGATTTCCCCACGC	3496

Db	3820	TGCATCTTCTGTTTGGCTGGCCCTGTTTGGCGGTGATCTCCAGGCACAGCCCTCAGTGGC	3879
QY	3497	TATCGGGGTTCGGCATCTCTTATATGCTGTCACATTAAAGCGGGCTGTTCCAGTTTACGGTC	3566
Db	3880	TTGGTGGGCTCTCAGTGTGTCTTACTATTCGACAGTCAACCACGACTTGAACATGGCGTGGTT	3933
QY	3557	AGACTGCAATCTGAGACAGAGAGCTCGATTCCCTGGTGGAGAGATCAATCATTACATT	3618
Db	3940	CGGATGTCAATCTGAAATAGAAACCAACATTCGTGGCCGTGGAGAGCCTCAAGAGATTCCA	3999
QY	3617	AAGACTGTCTCTTGGAGAGCACTGGCCAGATTTAAACAAGGCTCCCTCCCTACATGG	3678
Db	4000	GAGACTAGAA--GGAGCGCCCTGGCAATTCAGAGAACACGTCGCCCGCAGCACTGG	4056
QY	3677	CCCCAGAGGAGAGAGTGGACCTTTGGAGAACGCGAGATGAGTACCAGAGAAACCTCCCT	3738
Db	4057	CCCCAGTGGGCGGAGTGGGAATTTCCGGAATCTACTGCTCGCTGCTACCGAGAGAGCACTGGAC	4118
QY	3737	CTGCTCTTAAGAAAGTATCTCTTCACGATCAAACTTAAAGAGAGATTGGCATTTTGGGG	3796
Db	4117	TTTCCTTCTCAGGACATCAATATGCAGATCAATAGGGGGGAAAAAGTGGCATCTGTGGGG	4178
QY	3797	CGGACAGATCAGGAGAAATCTCGTGGGGATGGCCCTCTCCGATGGGTGAGATTACT	3856
Db	4177	CGGACGCGGAGCTGGGAAGTGTCTCTCGACCCCTTGGCTTATTTTCGATCAACAGTCTGCC	4238
QY	3857	GGAGGCTGCATCAAGATTGATGGAGATGCATGATATTTGGCTTGGCCGACCTCCGA	3918
Db	4237	GAAAGAGATATCATATCATGATGGCATCAACATCGCCAAATGGCCTGCACAGCACTCCGC	4296
QY	3917	AGCAAACTCTCTATCAATCTCTCAAGACCGGGCTGTCTAGTGGCACTGTCAATCAAT	3978
Db	4297	TTCAAGATCCACATCATCCCCAGACCCCTGTTTGTGTTTGGGGTTCCCTCGAATGAAAC	4356
QY	3977	TTGGACCCCTTCAACACAGTACATCTGAAGACAGATTGGAGTGGCCCTGGAGAGACACAC	4036
Db	4357	CTGGACCATTTACGCCAGTACTCGGATGAAGAAAGTGTGGAGCTCCCTGGAGCTGGCCAC	4416
QY	4037	ATGAAGAAATGTATTGCTCAGCTACCTCTGAAACTTGAATCTGAAGTATGAGAAATGGG	4096
Db	4417	CTGAAGAGACTTGTGTACAGCCCTTCTGTGAACAGCTAGACCAATGTCGAAGAAAGCCGG	4478
QY	4097	GATTAATCTTCAATGGGGGGAAGCGGAGCTTGTGATGTAGTAGACCTGTGCTCCGCAC	4156
Db	4477	GAGAACTCAGTGTGGGGAGCGCCACAGCTTGTGTGTGCTTACGCCCGGCGCTGTGAGGAAG	4536
QY	4157	TGTAGAATCTGATTTTATAGTAGAGCCACAGCTGCCATGGAGACAGACAGAACTTATTG	4216
Db	4537	ACGAAAGATCTTGTGTGTAGTAGGACGACGAGCGACGCGTGTGAACCTGAAACGGACGACTC	4596
QY	4217	ATTCAAGAGACCATTCGAGAGAGATTTGGAAGCTGTACCATCTTACCATTTGGCCATGCG	4276
Db	4597	ATTCAGTTCACCATTCGAGACAGTTCGAGAGCTGTACCCGTCCTCACATGCCCCACGG	4656
QY	4277	CTGCACAGGTTTCTAGAGCTCCGATAGAGATTATGTGTGTGGCCAGAGACAGTGTGTAGAG	4336
Db	4657	CTCAACACCATCATATGAGACTTACAAAGAGGTGATGTCTTGGAAAGAGAAATCCAGGAG	4716
QY	4337	TTTGACACCCCATCGGTCTCTTG 4360	
Db	4717	TACGGCGCCCATCGAGACTCTCG 4740	

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RESULT 13
US-08-463-179A-1
; Sequence 1, Application US/08463179A
; Patent No. 6001563
;
; GENERAL INFORMATION:
;
; APPLICANT: Cole, Susan P.C.
; APPLICANT: Deeleay, Roger G.
; TITLE OF INVENTION:
; METHODS FOR IDENTIFYING CHEMOSENSITIZERS
; NUMBER OF SEQUENCES: 6

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CORRESPONDENCE ADDRESS:
ADDRESSEE: LAHIVE & COCKFIELD
STREET: 60 State Street, suite 510
CITY: Boston
STATE: Massachusetts
COUNTRY: USA
ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: ASCII text
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/463,179A
FILING DATE:
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/966,923
FILING DATE: 27-OCT-1992
APPLICATION NUMBER: 08/029,340
FILING DATE: 8-MAR-1993
APPLICATION NUMBER: 08/141,893
FILING DATE: 26-OCT-1993
APPLICATION NUMBER: 08/407,207
FILING DATE: 20-MAR-1995
ATTORNEY/AGENT INFORMATION:
NAME: DeConti, Giulio A. Jr.
REGISTRATION NUMBER: 31,503
REFERENCE/DOCKET NUMBER: POI-002CP8
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 227-7400
TELEFAX: (617) 227-5941
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 5011 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: cDNA
FEATURE:
NAME/KEY: CDS
LOCATION: 196..4788
US-08-463-179A-1

Query Match 10.4%; Score 506.4; DB 3; Length 5011;
Best Local Similarity 52.4%; Pred. No. 1.3e-121;
Matches 1364; Conservative 0; Mismatches 1181; Indels 59; Gaps 9;
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RESULT 14
US-08-461-384B-1
; Sequence 1, Application US/08461384B
; Patent No. 6025473
; GENERAL INFORMATION:
; APPLICANT: Cole, Susan P.C.
; APPLICANT: Deeley, Roger G.
; TITLE OR INVENTION: MULTIDRUG RESISTANCE PROTEINS
; NUMBER OF SEQUENCES: 10
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PARTEO RESEARCH & DEVELOPMENT INNOVATIONS
; STREET: Queen's University at Kingston
; CITY: Kingston
; STATE: Ontario
; COUNTRY: CANADA
; ZIP: K7L 3N6
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: ASCII text
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/461,384B
; FILING DATE: 05-JUN-95
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/966,923
; FILING DATE: 27-OCT-1992
; APPLICATION NUMBER: 08/029,340
; FILING DATE: 8-MAR-1993
; APPLICATION NUMBER: 08/141,893
; FILING DATE: 26-OCT-1993
; APPLICATION NUMBER: 08/407,207
; FILING DATE: 20-MAR-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Steeg, Carol Miernicki
; REGISTRATION NUMBER: 39,539
; REFERENCE/DOCKET NUMBER: 01547
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (613) 545-2342
; TELEFAX: (613) 545-6853
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 5011 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 196..4788
; US-08-461-384B-1

Query Match 10.4%; Score 506.4; DB 3; Length 5011;
Best Local Similarity 52.4%; Pred. No. 1,3e-121;
Matches 1364; Conservative 0; Mismatches 181; Indels 59; Gaps 9;

QY 1811 CACATCACCTGGGCGCATGCTTACAGAGACACTGCACAGCATGATCTGGAGATC 1870
Db 2142 CACATTCACCTGGGCGCA--GGAGGAGACCTCCCACTGAATGAGCATCACTTCCATC 2199
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GenCore version 4.5
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OM nucleic - nucleic search, using sw model

Run on: August 11, 2002, 09:17:10 ; Search time 5627.18 Seconds
(without alignments)
18635.330 Million cell updates/sec

Title: US-09-528-031-1

Perfect score: 4847
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Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 21979536 seqs, 10817449327 residues

Total number of hits satisfying chosen parameters: 43959072

Minimum DB seq length: 0
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Post-processing: Minimum Match 0%
Listing first 45 summaries

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5	4792.6	98.9	5838	62	US-60-233-468-205	Sequence 205, Appl
6	4792.6	98.9	5838	70	US-60-313-371-205	Sequence 205, Appl
7	4775.4	98.5	4781	12	US-08-843-459-1	Sequence 1, Appl1
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15	2838.6	58.6	3872	30	US-09-760-470-26	Sequence 26, Appl
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17	2750.6	56.7	4554	29	US-09-726-807-3818	Sequence 3818, Appl
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22	1078.6	22.3	1908	30	US-09-783-514-1747	Sequence 1747, Appl
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ALIGNMENTS

RESULT 1

US-09-528-031-1

Sequence 1, Application US/09528031

GENERAL INFORMATION:

APPLICANT: SHYJAN, Andrew

TITLE OF INVENTION: NOVEL MULTIDRUG RESISTANCE-ASSOCIATED

POLYPEPTIDE

NUMBER OF SEQUENCES: 8

CORRESPONDENCE ADDRESS:

ADDRESSEE: LAHIVE & COCKFIELD, LLP

STREET: 28 State Street

CITY: Boston

STATE: Massachusetts

COUNTRY: USA

ZIP: 02109

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/528,031

FILING DATE: 17-Mar-2001

CLASSIFICATION: <Unknown>

ATTORNEY/AGENT INFORMATION:

NAME: Elizabeth A. Hanley

REGISTRATION NUMBER: 33,505

REFERENCE/DOCKET NUMBER: MNI-056CP

TELECOMMUNICATION INFORMATION:

TELEPHONE: (617) 227-7400

TELEFAX: (617) 742-4214

INFORMATION FOR SEQ ID NO: 1:

SEQUENCE CHARACTERISTICS:

LENGTH: 4847 base pairs

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: linear

FEATURE:

NAME/KEY: CDS

LOCATION: 116..4426

SEQUENCE DESCRIPTION: SEQ ID NO: 1:

US-09-528-031-1

Query Match 100.0%; Score 4847; DB 19; Length 4847;

Best Local Similarity 100.0%; Pred. No. 0;

Matches 4847; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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3121 TGAAGTGGGCTGCGGTTTCCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3180
3181 CATCTCTTTTCAAGTCTGACATTTTCTCAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3240
3181 CATCTCTTTTCAAGTCTGACATTTTCTCAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3240
3241 GGAAGTATGAG 3300
3241 GGAAGTATGAG 3300
3301 CACCATTCAG 3360
3301 CACCATTCAG 3360
3361 TGACAAAG 3420

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Db 3361 TGACAAACAGCTCTTTTGTGTTGTTGATGCGGTGGCTGGGCT 3420
Qy 3421 GGACCTCANTACATCGCCCTCATACCAACGCGGCGCTGATGATCTTATGACGG 3480
Db 3421 GGACCTCANTACATCGCCCTCATACCAACGCGGCGCTGATGATCTTATGACGG 3480
Qy 3481 GCAGATTCCTCCAGCTATGCGGGTCTGCCATCTTATGCTGTCACCTTAACGGGCT 3540
Db 3481 GCAGATTCCTCCAGCTATGCGGGTCTGCCATCTTATGCTGTCACCTTAACGGGCT 3540
Qy 3541 GTTCAGTTTACGTCACATGCGCATCTGACAGAGAGCTGATTCACCTCGTGAGAG 3600
Db 3541 GTTCAGTTTACGTCACATGCGCATCTGACAGAGAGCTGATTCACCTCGTGAGAG 3600
Qy 3601 GATCAATACATATTAAGTACTCTCTTGGAGACCTGCGCAATTAAGACAGGC 3660
Db 3601 GATCAATACATATTAAGTACTCTCTTGGAGACCTGCGCAATTAAGACAGGC 3660
Qy 3661 TCCCTCCCTGACTGCGCCCAAGAGAGAGTGCCTTTGAGAGCGAGAGATGAGTA 3720
Db 3661 TCCCTCCCTGACTGCGCCCAAGAGAGAGTGCCTTTGAGAGCGAGAGATGAGTA 3720
Qy 3721 CCGAGAAATCCTCCTCTGCTCTTAAAGATATCTTCAAGATCAAACTTAAGAGA 3780
Db 3721 CCGAGAAATCCTCCTCTGCTCTTAAAGATATCTTCAAGATCAAACTTAAGAGA 3780
Qy 3781 GATTGGCATGTGGGGCGGAGATGAGAGAGTCTGCTGGGAGTGGCCCTCTTCG 3840
Db 3781 GATTGGCATGTGGGGCGGAGATGAGAGAGTCTGCTGGGAGTGGCCCTCTTCG 3840
Qy 3841 TCTGGTGAATTAATCTGAGGCTGCATCAATGATGATGAGATGAGATGATGG 3900
Db 3841 TCTGGTGAATTAATCTGAGGCTGCATCAATGATGATGAGATGAGATGATGG 3900
Qy 3901 CCTTCCGACCTCCGAGAAACTCTATCATCTTCAAGAGCGGCTGCTCACTG 3960
Db 3901 CCTTCCGACCTCCGAGAAACTCTATCATCTTCAAGAGCGGCTGCTCACTG 3960
Qy 3961 CACTGTGATCAATTAATGAGCCCTTCAACATGATGATGATGATGATGATG 4020
Db 3961 CACTGTGATCAATTAATGAGCCCTTCAACATGATGATGATGATGATGATG 4020
Qy 4021 CCTGGAGAGACACATGAAAGATGATGCTGAGTACCTGTAACCTGTAATCGA 4080
Db 4021 CCTGGAGAGACACATGAAAGATGATGCTGAGTACCTGTAACCTGTAATCGA 4080
Qy 4081 AGTATGAGAGATGGGATTAATCTCTAGTGGGAGCGGCTTGTGCATAGCTAG 4140
Db 4081 AGTATGAGAGATGGGATTAATCTCTAGTGGGAGCGGCTTGTGCATAGCTAG 4140
Qy 4141 AGCCCTGCTCCGACATGATGATTTGATGATGATGATGATGATGATGATG 4200
Db 4141 AGCCCTGCTCCGACATGATGATTTGATGATGATGATGATGATGATGATG 4200
Qy 4201 AGAGACAGACTTATGATTAAGAGACATCCGAGAAAGCATTTGACAGCTTACATGCT 4260
Db 4201 AGAGACAGACTTATGATTAAGAGACATCCGAGAAAGCATTTGACAGCTTACATGCT 4260
Qy 4261 GACCATTTGCCATCGCTGACACAGGCTTGAAGCTCCGATAGATATGCTGCTGCCA 4320
Db 4261 GACCATTTGCCATCGCTGACACAGGCTTGAAGCTCCGATAGATATGCTGCTGCCA 4320
Qy 4321 GGAGACAGTGGTGAAGTTGACACCCCATGGTCTTGTCCAGACAGATGATGATG 4380
Db 4321 GGAGACAGTGGTGAAGTTGACACCCCATGGTCTTGTCCAGACAGATGATGATG 4380
Qy 4381 CTATGCCATGTTGCTGCTCAGAGAAAGGCTGCTGAAGGGCTGACTCTCTCTGT 4440
Db 4381 CTATGCCATGTTGCTGCTCAGAGAAAGGCTGCTGAAGGGCTGACTCTCTCTGT 4440
Qy 4441 TGACGAAGTCTCTTTTGTAGAGCATGCTGCTGCTGGGCGGCGCCCTTATC 4500

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Db 4441 TGACGAAGTCTCTTTTGTAGAGCATGCTGCTGCTGGGCGGCGCCCTTATC 4500
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Db 4501 GGTCTCTCTACCGAAACCTTGCTTCTGATTTTATCTTTCGACACAGTCCGAT 4560
Qy 4561 TGGCTTGTGTCTTACCTTTTAGGGAGTCAATTTTATTTATTTATTTCCATAT 4620
Db 4561 TGGCTTGTGTCTTACCTTTTAGGGAGTCAATTTTATTTATTTATTTCCATAT 4620
Qy 4621 TCATGTAACAAATTAATTTTGTGTTTCTTATATGACCTTAAAGGTCCAGGAACGT 4680
Db 4621 TCATGTAACAAATTAATTTTGTGTTTCTTATTTGACCTTAAAGGTCCAGGAACGT 4680
Qy 4681 TATTAATTAATTTATGAGAGCGCTATTAATGAACTTATACGTATATATATAT 4740
Db 4681 TATTAATTAATTTATGAGAGCGCTATTAATGAACTTATACGTATATATATAT 4740
Qy 4741 AATTCGTATACGCTATATTTATACGTGAAATGATGATGATTTATTTATTAAT 4800
Db 4741 AATTCGTATACGCTATATTTATACGTGAAATGATGATGATTTATTTATTAAT 4800
Qy 4801 AAGCACTGTCTATAAAAAAAAAAAAAAAAAAAGGCGGCGCC 4847
Db 4801 AAGCACTGTCTATAAAAAAAAAAAAAAAAAAAGGCGGCGCC 4847

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RESULT 2
US-09-606-680-4282
; Sequence 4282, Application us/09606680
; GENERAL INFORMATION:
; APPLICANT: Lloyd, Clare M.
; APPLICANT: Williamson, Mark
; APPLICANT: Shyjan, Andrew W.
; TITLE OF INVENTION: NOVEL NUCLEIC ACID MOLECULES AND USES
; FILE REFERENCE: 1600, 1131-001
; CURRENT APPLICATION NUMBER: US/09/606, 680
; CURRENT FILING DATE: 2000-06-27
; PRIOR APPLICATION NUMBER: 60/141, 227
; PRIOR FILING DATE: 1999-06-29
; PRIOR APPLICATION NUMBER: 60/141, 226
; PRIOR FILING DATE: 1999-06-29
; NUMBER OF SEQ ID NOS: 4394
; SOFTWARE: FASTSEQ for Windows Version 3.0
; SEQ ID NO 4282
; LENGTH: 5890
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-606-680-4282

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Query Match 99.0%; Score 4800.6; DB 23; Length 5890;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 4814; Conservative 0; Mismatches 4; Indels 1; Gaps 1;

Qy 1 GGCCTAAGTCTGGGAGGCTGTTAGCGGCTGGCGGCTTCTGAGACAGGCGCAG 60
Db 84 ggcctatgctcggagagcgtgttagcgcgctggcgcttctgagacagcgag 143
Qy 61 GAATTCGATGTAACCTAAGCTGAGCGCTGGAGCACTCCACATCAGAGAGATGAA 120
Db 144 gaattcgaatgtaaacctaagctgagcgctggagcaactccacatcagaagaatgaa 203
Qy 121 GGATATGACATAGGAAAGATATATATCCAGTCTGAGTATAGAGTGTGAGGGA 180
Db 204 ggaatcgaatgtaaacctaagctgagcgctggagcaactccacatcagaagaatgaa 263
Qy 181 GAGACACAGACTTCTGGAGCAGACAGACAGCTGAAAGATTTCAAGTTCAAGAACTCG 240
Db 264 gagaacacagacttctggagcagacagacagctgaaagatttcaagttcaggaactcg 323
Qy 241 ACGTGTGAATGCCAATGCTTGAACAGACGCGCCGAGCGAGGCGCTCTCTTGA 300

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Db 324 accgttggaaatgcgaagatgccttggaaacagagccgagccgagggctctctcttga 363
QY 301 TGGCTTCATGCAATTCCTACACTCAGAAATCGTGATGAGGACATCCCAAGGAAAGTACCA 360
Db 384 tgcctccatgcatcttccactcagaatccctgtagtagagatcccaagggaaagatcaca 443
QY 361 TCATGCTGAGTGTCTCTAAGGCCATCCGGACTACTCTTCAAAACACAGACCCACTGGA 420
Db 444 tcatggtctgagtgctctgaagcccatccggactacttccaaacacacacacccagtgga 503
QY 421 CAATGCTGGGCTTTTCTGTATGACTTTTCTGCGCTTTCTCTGCGCCGTGTGCG 480
Db 504 caatgctggcttttctctgtatgacttttctgcttcttctctctctgcccgtgtgc 563
QY 481 CCACAAGAGGGGAGAGCTCTCAATGGAACAGCTGTGTCTCTCTCAAGCAGAGCTTTC 540
Db 564 ccacaagaaggaggagcttccatggaagacgtgtgtctctgtcccaagcacagagcttcc 623
QY 541 TGACGTGACTGCAGAGACTAGAGAGCTGTGGCAAGAGACTGAATGAATGTGGGC 600
Db 624 tgactggaatctgcagaagctagagagactgtggaagaagagctgaatgaagtgtggcc 683
QY 601 AAGAGCTGTCTCCCTGCGAAGGGTGTGTGATCTTCTGCCGACACAGGCTCATCTGTTC 660
Db 684 agagagctgtctccctgcgaagggtgtgtgactctctgcgcgaacagagctcatctgttc 743
QY 661 CATCGTGTGCTGTATGATACAGCAGCTGGCTGCTTCACTGACACAGCCTTCAATGTGAA 720
Db 744 catctgtgtctgtatgatacagagctgtgtctcagtggaacggctctcatgtgaa 803
QY 721 ACACCTTGGAGTATACACGAGCAACAGAGTACTACGAGTACAGCTGTGTGTAGT 780
Db 804 aaacctcttgagatataccagagcaacagagcttaaccgacgataagctgtgtgtgaat 863
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Db 924 gaattaccgacacgggtgtctgtcgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 983
QY 901 CCTTAAGTAAAGACATTAAGAGAAATCCCTGGGTGAGCTCAACAATTTGCTCCAA 960
Db 984 ccttaagttbaaagaacataaagaagaatccctgggtgagctcaacaatctgtcccaa 1043
QY 961 CGATGGGCAAGAAATGTTGAGGACAGCAGCCGTTGGCAGCTGCTGGTGGAGAGCCGG 1020
Db 1044 cgaatgggcaagaatgtgttgagagcagacggtgtgcaagcctgtgtgtgtgtgtgtgtgt 1103
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QY 1081 ATCAGTGTCTTATCCCTTTTAACTTAACTTAACTTAACTTAACTTAACTTAACTTAA 1140
Db 1164 atcaagctgttttatactcttataccagcaagatgtgtgtgtgtgtgtgtgtgtgtgtgtgt 1223
QY 1141 TTTTCAGGAAATATGCGTGGCGCCAGCATGAACTGTTCAGAAATGAATGAATTTCT 1200
Db 1224 ttctcaggaataatgt 1283
QY 1201 TACCTTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTA 1260
Db 1284 tacttataataatataataatgtatgtcctgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 1343
QY 1261 GAAATCCGCGAGGAGGAGCGTGTATTTGAAAAAGCGGCTACTTCCAGAGCATCAC 1320
Db 1344 gaaataccgagagagagagctgt 1403
QY 1321 TGTGGGTGTGCTCCCATTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1380
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Db 1404 tgt 1463
QY 1381 GACCTTGGGCTTGTGATCTGACACAGCAGCTTTTACAGGTGTGTGTGTGTGTGTGTGTGT 1440
Db 1464 gaccttgggcttgcatactgcagcaagagcttccaaagtggtgtgtgtgtgtgtgtgtgtgt 1523
QY 1441 CATGACTTTTGTGAAAGTAACTACACCGTTTGTAGTAAAGTCCCTGTCAAGACCTCAGT 1500
Db 1524 catgactttgtcttgaagaataacacggttttaagtaagttccctctcgaagccctcagt 1583
QY 1501 GCGTGTGTGACAGATTTAAGATTTTGTCTTAATGAAAGAGGTTTACATGTATAAGACAA 1560
Db 1584 gctgt 1643
QY 1561 ACCAGCAGTCTTCATCATCAAGATTAAGATGAAGAAATGCCACTTGTGGCATGGGACTTC 1620
Db 1644 accagcagctctcacaatacaagaatagaatgaagaatgtccacatgtgcagtgtgtgtgt 1703
QY 1621 CCACCTCAGATTCAGAACTCGCCCAAGCTGACCCCAAAATGAAAAAGACAAAGAGGC 1680
Db 1704 ccactcagatataccagaatctgcaccaagctgtgaccccaaaatgaataaagacagaaggtc 1763
QY 1681 TTCCAGGGGCAAGAAAGAGAGGTGAGCAGCTGACAGCGCATGTAGCATCAGCGGTGCT 1740
Db 1764 ttccagggcagaagaagaagaagtgagagagctgtcagcgacgtgagcatcaagcgtgtgt 1823
QY 1741 GGCAGAGCAAAAGGCCACTCTCTCTGTGACATGACAGAGCGGCCCAAGTCCCAAGAGCA 1800
Db 1824 ggcagagcagaagaagcaccctctctctgtgacaagtgcagcgcagctcccaagagaga 1883
QY 1801 AGAAGCAAGCAATCATCATCTGGGCAACGCTTCTTACAGAGAGCACTGACAGCATGCA 1860
Db 1884 agaaagcagaacacataccaactgtggccaactgtgtctaacagaagacatctgcacagctcga 1943
QY 1861 TCTGAGATCCAGAGAGGTAACCTGTGTGGAATCTCGGCACTGTGAGGAAGTGGAAAAAC 1920
Db 1944 tctgagatcccaagaggttaaacctgtgtgaatctcgtgagagtggtgtgtgtgtgtgtgtgt 2003
QY 1921 CTCTCTCATTTTCAAGCATTTTAAAGCCAGATGACGCTTCTTAAGAGGCAAGCTTTCATCAG 1980
Db 2004 ctctctcatcttcagcatctttagccaagatgacgtctcttagagtggaagcatctcaatcag 2063
QY 1981 TGGAACTTCGCTTATGTGTGGCCCAAGCAGGCGCTGATCTCAATGCTAATCTGTGAGACAA 2040
Db 2064 tggaaacttcgtcttattgt 2123
QY 2041 CATCTGTTTGGGAAAGAAATATGATGAGAAAGATCAACTGTGTGTAACAGCTGTCTG 2100
Db 2124 catctcgtttgtgaaagaatatagtatgaagaagaatacaactctgtgtgtgtgtgtgtgtgt 2183
QY 2101 CCGAGGCGTGAACCTTGCCATTCTTCCAGACGACCTGACGAGAGATTGGAGCGAGG 2160
Db 2184 cctgagagcctgcagctgtgcatcttccagcaagcctgtgacgagatgtgaaagcgaag 2243
QY 2161 AGCCAACCTGAGGCGGTGGGAGCGGCAAGAGATCAGCTTGGCCGGGCGCTGTATGTGA 2220
Db 2244 agccaacctgagcgt 2280
QY 2221 CAGGACATCTACATCTGTGACAGACCCCTCAGTGTGCTTAAAGTCCCATGTGGGCAACA 2280
Db 2304 caggagcatctataatctctgtgaagacccctcagtgctcttagatgtcccatgtgtgtgtgt 2363
QY 2281 CATCTTCAATAGTGTATCCGGAACATCTCAAGTCCAAAGACAGTTCTGTTTGTACCCA 2340
Db 2364 catcttcaatagtgcatctcggaaacatctcaagltccaaagacagttctgtgtgtgtgtgt 2423
QY 2341 CCAGTTACAGTACCTGTTGACTGTGATGAAGTGAAGTCAATGAAAGAGGCGCTGTATTAC 2400
Db 2424 ccagttacagtaactgt 2483
QY 2401 GGAAGAGGCAACCATGAGGAACGTGATGAATTAATTTAAATGTGTGACTATGCTAACATTTTAA 2460
Db 2484 ggaagaagcaccatagaggaactgt 2543
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QY	2461	TAACCTGTTGCTGGAGAGACACCCGCCAGTTGAGATCAATTCAAAAAGGAAACCACTGG	2520
Db	2544	taacccgtttgcttggagagacacccgcagtttgatcaattccaaaaaaggaaacagttgg	2603
QY	2521	TTTCACGGAAGAACTCCACAGACAAAGGCTCTTAACCGAGTTCATTAAGAAAGAAAAGC	2580
Db	2604	ttcacacgaagaagtccacagacaaggttccaaacaggtccgltlaaagaagaaaagc	2663
QY	2581	ACTAAAGCCAGAGGAAGGCGAGCTTTCGACCTGGAAGAGAAAGGCGAGGTTCACTGACC	2640
Db	2664	agtaaagccaggaagaggcagcttctgycagctggaagagaaggcgaggtttcagtgcc	2723
QY	2641	CTGGTAGTATATGAGGTCTACATCCAGGCTGTGGGGGCCCTTGCCATTCCTGGTTAT	2700
Db	2724	ctggttcagatatagttglttcaactccaaagcttgcgtggggcccttggcattccctgttat	2783
QY	2701	TATGGCCCTTTTCATGCTGATATGTAGGACGACCGGCTTCAGCAGCTGGTGTTGAATTA	2760
Db	2784	tatggcccttttcatatgtctgaigttaggcagccacgccttcagaccttggtgttgagta	2843
QY	2761	CTGGATTCAGCAAGGAAGGGGGGAACCCACTGTGACTCCAGGGAACGACAGACTTCGGTAG	2820
Db	2844	ctggatccaagcaaggaaggcggaacccactgtgactcgaagggaacgaagacccctcgtltag	2903
QY	2821	TGACAGCATATGAGGAGCAATCTCATATGAGATCTATGCACTATGCGAGATCTACGCCCTTCAT	2880
Db	2904	tgaacagcatatgaaggaaacatcccatatgtcagtaactatgtccagcatctaacgcccctccat	2963
QY	2881	GGCAGTCATGCTGATCTCTTAAGAACCATTCGAGGAGTTGTCCTTGTCAAGGGCACGCTGC	2940
Db	2964	ggcagtcatagtctcgtactccctaagaaccatcgaagagatgttcttgcataaggcaacgctgcg	3023
QY	2941	ACCTTCCTCCCGGCTCAGACGAGGTTTTCGGAAGATCCCTCGAAGCCCTATGAAATT	3000
Db	3024	agcttcctcccgctcgtacatgaagagctttccgaaggaaccttcggaagccctctgaagtt	3083
QY	3001	TTTTGACACGACCCCCACAGGGAGATTCTCAACAGGTTTTCCAAAGACATGATGAAAT	3060
Db	3084	ttttgacaagacccccacagaggatcttccaacaggttttccaaagacatgatagaagt	3143
QY	3061	TGACGGCGGCTGCGGTTCCAGGCGGAGATGTTCAATCCGAAGCCTATCTGGTGTCTT	3120
Db	3144	tgaagtgaggctcgccgcttcccaaggccgaagtgltcatccgaagagttatccctgtgttctc	3203
QY	3121	CTGTGTGGGAATGATCGCAGGAGTCTCCCGATGTTCTTGTGGCAGTGGGGCCCTGTG	3180
Db	3204	ctgtgtgggaatgatcgacgagagcttcccgatgttcttgtggcagtgaggggcccttgc	3263
QY	3181	CATCCTCTTTTAGTCTTCGCAATATGTCTCCAGGCTCTGATTTCCGGAGCTGAAGCGTCT	3240
Db	3264	catcctcttttagtcttcgacatgtctccagggtccctgattcgggaagctgaagcgctc	3323
QY	3241	GGACATATACAGCAGTCACTTTCTCTCCCAATCAGCTCAGATACAGAGGCGCTTGC	3300
Db	3324	ggacaatatcaagcaggtaccccttccctccacaatcaagltccagatacagggccttgc	3383
QY	3301	CACCATTCACGCGCTTCAATAAAGGCGAGAGTTTTCGCAAGATACAGAGCTGTGA	3360
Db	3384	caccatccaagcctcaataaaggcgaggtttctgcacagataccagagcgtgtgta	3443
QY	3361	TGACAAACCAAGTCTTTTTTTTGTGTTACGTGTGGAGCGGTGGCTGTGGGCT	3420
Db	3444	tgaacaacaagctccttttcttcttgaagtgatcagtgagtgaggcttgcgttgagct	3503
QY	3421	GGACCTCATCAGCATGCGCTTCATCAGCAACGAGGGGCTGATGATCGTTATGACAGG	3480
Db	3504	ggacctcatcagcatgcacctcatcacacaacagggtcgatgatcgttctatgacgg	3563
QY	3481	GCAGATTCCCCAGCGCTATGGGGGTCTGGCCATCTCTTATGCTGTCCAGTTAACGGGCT	3540
Db	3564	gcagattccccagcctatgtcggggtctcgccactcttatgctgtccagttlaaggggct	3623

QY	3541	GTTCACAGTTTACGGTCAGACTGGCATGTGAGACAGAACTCGATTACCTCGGTGGAGAG	3600
Db	3624	gttccagtttcaacgttccagactcgtcatctcgaagaagctcgtattcaacctcgttggagag	3683
QY	3601	GATTCATACATCAATCAATTAAGATCTGTGCTTTGGAAGCACTGGCCAGAAATTAAACAAACAGC	3663
Db	3684	gattcaatacaatacaatlaaagaactcgtctcttggaaagcaccctgcagaattaaagaacaagc	3743
QY	3661	TTCCCTCCCTGACTGTGCCCCCGAGAGGAGAGGTGACCTTTTGAGAACGACGAGATCAGTA	3720
Db	3744	tccctcccttgaactcgtgcccaaggaggaggtgagactcttggaaagcaagagatgaagta	3803
QY	3721	CCGAAAAAACTCCCTCTCGTCTCTTAAAGAAAGTATCTTACAGATCAAACTTAAAGAA	3780
Db	3804	ccgaaaaaaactccctctcgtctcttaagaaagatcttcaacgattcaaacctlaagaa	3863
QY	3781	GATTGGCAATTGGGGGGGAGAGATGAGGAAGTCTCTGGCTGGGGATGCCCCCTTTCCG	3840
Db	3864	gatttggcaattgagggggagagatgaggaagtctctggctggggatggccccctttccg	3923
QY	3841	TCTGTGTGAGTTATCTGTGAGGCTTCATCAAGATTGATGAGAGATATAGTAAATTGG	3900
Db	3924	tctgtgtgagtattctcgtgaggctcgtcatcaagatcttggtagtggagatcaatgtatcttg	3983
QY	3901	CCTTCCGACACTCCGAAAGCAAACTCTGTATCATTTCTCTCAAGACCGGTCTGTTCAATGG	3960
Db	3984	ccttccgacctccgaagcaaacctctatcatctctcaagaccggtcgtctgaatcgtg	4043
QY	3961	CACCTCGATCAATTAATTGGACCCCTTCACACGTCATCACTGAAGACGAGATTGGAGTGC	4020
Db	4044	cactcgtcaatcaaatcttggaccccttcaacgaactgaacttgaagaccgaatttggatgc	4103
QY	4021	CCTGGAGAGACACACATGAAAGAAATGTATTGTCACGTACCTCTGAAACTTGGATCTGA	4080
Db	4104	cttggagaggacacacatlgaaagaatgtattgttcagtaactctcgtaaacttgaatctga	4163
QY	4081	AGTATGAGAGAAATGGGATTAATCTTTCAGTGGGGGAGACGCACTTTGTGATBACTAG	4140
Db	4164	agtgtatgagaatlgggatlaactctcgaatggggagacgagcctctgtcatagctag	4223
QY	4141	AGCCCTGCTCCGCCACGTGAAGATTGATTTAGATGAAAGCACAGCGTCATGAGACAC	4200
Db	4224	agccctgctccgcacatgtaagaattcgtattttagatgaaagcacaagctgcacatggaac	4283
QY	4201	AGAGACAGACTTATTTGATTCAAGAGACATCCGAGAAAGATTGGACACTGTACATAGCT	4260
Db	4284	agagacagactatttgaattcaagaagccatcagagaagattttagacttgaactatgact	4343
QY	4261	GACCATTTGCCATGCGCTGACACAGGTTTAGGCTCCGATAGATTAATGTTGTCGGCCCA	4320
Db	4344	gaccatttgcacatcgctcgtcacacaggttctcgaatgataatgattatgctgtgcacca	4403
QY	4321	GGGACAGTGGTGAGTTTACACCCCATTCGGCTTCGTCCACACGACACTTCCCATTT	4380
Db	4404	gggacagtggtggaagtttgaacccccacatcggtcctctgtccaacgaagcttccgatt	4463
QY	4381	CTATGCCATGTTTGTCTGCTCCAGAGAAAGGTCGTCGACAGGGCTCACTCCCTGT	4440
Db	4464	ctatgccaatttgcgtcgtcgaagaagaagtgctgttcaagggctgtactcctcctgt	4523
QY	4441	TGACGAAGTCTCTTTTCTTTAGAGCAFTGCCATTCCTCGTGGGGCGGGCCCCCTTATC	4500
Db	4524	tgaagaaagtctcttcttctttagagcatlgaatccctcgtccgtgggcggccctcctc	4582
QY	4501	GGGTGTCCTTCACGAAGACTTGGCTTTCGCAATTTATCTTTGACACAGCAAGTTCGGAT	4560
Db	4583	gggttcctccacgaagaaacttgccttccgatttatacttccgacagcagttccgagt	4642
QY	4561	TGGCTGTGTGTTTCACTTTTAGGAGACTCAATTTTGATTATTTGATTATTCATAT	4620
Db	4643	tggctgtgtgttcaacttttagagagacatactttagattatcttattatccaat	4702
QY	4621	TCAATGAACAAATTAATGTTTTGTCTTAAATTCACCTCAAAAGTCAAGAACGAT	4680

Db 4703 tcatgttaaacaattagtttcttcttaattgacactaaaggctcaaggaacgct 4762
OY 4681 TATTATAATTTGATACAGAGCCATATATAGAGCTTTAGCTAGCTATATATAT 4740
Db 4763 taltataattgtatcagaagccataataagcttatacgtgtagctatactat 4822
OY 4741 AATTCTGATACATAGCTATATTTTACAGTGAATAATGTAAGCTGTTATTTATTAAT 4800
Db 4823 aattcgtatataagccataatttcaacgtgaaatgttaagctgttattataataat 4882
OY 4801 AAGCACTGTGCTAAAAA 4819
Db 4883 aagcactgtgctaataca 4901

RESULT 3

PCT-US99-06644-3
Sequence 3, Application PC/TUS9906644
GENERAL INFORMATION:
APPLICANT: Fox Chase Cancer Center
APPLICANT: Kruh, Gary D.
APPLICANT: Lee, Kun
APPLICANT: Belinsky, Martin G.
APPLICANT: Bain, Lisa J.
TITLE OF INVENTION: MRP-Related ABC Transporter Encoding
FILE REFERENCE: PCCC 98-02
CURRENT APPLICATION NUMBER: PCT/US99/06644
EARLIER FILING DATE: 1999-03-26
EARLIER APPLICATION NUMBER: 60/079,759
EARLIER FILING DATE: 1998-03-27
EARLIER APPLICATION NUMBER: 60/095,153
NUMBER OF SEQ ID NOS: 8
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 3
LENGTH: 5838
TYPE: DNA
ORGANISM: Homo sapiens
PCT-US99-06644-3

Query Match 98.9%; Score 4792.6; DB 1; Length 5838;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 4809; Conservative 0; Mismatches 9; Indels 1; Gaps 1;
OY 1 GGCTCATGCTCGGAGCGTGGTGGAGCGGCTGGCGGTTGCTGTGAGAGGAGGCGCAG 60
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OY 61 GAATTTGATGTGAATACTAATCACTGTGTGAGCCCTGGAACCTCCTCAGAGAGAGTGA 120
Db 71 gaatttgtatgtgaatacactaactgtgtgagccctggaacctcgcctcagagagatgaa 130
OY 121 GGAATTCGACATGGAAGAT 180
Db 131 ggaatacgaatacgaatacgaatacgaatacgaatacgaatacgaatacgaatacgaata 190
OY 181 GAGAACCAAGCACTTGTGGAGCAGCAGAGACCGTGAAGATTCCAGTTCCAGAGAACTCG 240
Db 191 gagaacccaagcaacttctggaagcagagacgctggaagattccaagttagaggaactcg 250
OY 241 ACGCTTGGAATGCGAAGATGCTTGTGAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 300
Db 251 accgttggaaatgccaagatgtccttgaagacagagccgagccgaggtcctcctcttga 310
OY 301 TGCCCTCATGATTTCAAGCTCAGATCTGATGATGATGATGATGATGATGATGATGATGAT 360
Db 311 tgcctcatgcatcttcagatcagatcagatcagatcagatcagatcagatcagatcagatc 370
OY 361 TCATGCTTGAATGTCTGTGAAGCCATCCGAGACTTGTGCAAAACACAGCAGCAGTGA 420

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Db 431 caatgctgggcttttctcctgtatgacttttcgtggtcttctctcgtccgtgtggtc 490
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Db 611 agagctgcttccctcgtcaagaggtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 670
OY 661 CATGCTGCTGATGATACAG 720
Db 671 catgctgctgagatgatacagcagcagctgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 730
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Db 851 gaattacggaaccggtgctgt 910
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QY 1861 TCTGAGATCCAGAGGGTAAACTGTTGGAATCTGCGCATGTGGGAAAGTGAAGAAC 1920
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Db	3731	ccggagaacactccctcttgtctctaaagaagttatcttccacgatcaaaccttaagaa	3790
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Qy	4021	CCCTGAGAGACACACATGAAAGAAATGTTTCTCAGTACTCTCGAATCTTGAACTTGATCTGA	4080
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Qy	4081	AGTGTATGAAATGAGGGATTAACCTTCTCATGTGGGGAGACGCGAGCTTGTGCATAGCTAG	4140
Db	4091	agtgatgagaaatcggggataactctccagtgggggaagcgacgctcttggcatagctag	4150
Qy	4141	AGCCCTGCTCCGCACTGTAAGTTCGATTTTAATGAAGCCACAGCTGCCATGAGAC	4200
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Qy	4321	GGGACAGGTGTGTGAGTTTGACACCCCATCGCTCTTCTGTCCAAGACAGTCCCGATT	4380
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Db	4690	tattataattgtatcagagccctataatgaaagctttataacgtgtatgcctatatcatat	4749
Qy	4741	AATTCTGTACATAGCCATATTTTACAGTGAATGTAAGCTTTTATTTTATTTAAAT	4800

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QY 4801 AAGCACTGTCTAAAAAAA 4819
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RESULT 4
US-60-226-176-205
: Sequence 205, Application US/60226176
: GENERAL INFORMATION:
: APPLICANT: Ring, Huijun Z.
: APPLICANT: Malsen, Gareth
: APPLICANT: Townley, David
: APPLICANT: Morris, MacDonald
: TITLE OF INVENTION: Single Nucleotide Polymorphisms Associated With ADME Genes
: FILE REFERENCE: GX-0013-1-P
: CURRENT APPLICATION NUMBER: US/60/226,176
: NUMBER OF SEQ ID NOS: 2447
: SOFTWARE: PERL Program
: SEQ ID NO 205
: LENGTH: 5838
: TYPE: DNA
: ORGANISM: Homo sapiens
: FEATURE:
: NAME/KEY: misc_feature
: OTHER INFORMATION: GB:AF104942
US-60-226-176-205

Query Match 98.9%, Score 4792.6; DB 61; Length 5838;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 4809; Conservative 0; Mismatches 9; Indels 1; Gaps 1;

QY 1 GGCTCATCTCGCGGAGCGCTGTGAGCGGCTGCGGCTGTCGCGAGAGGGCGCAG 60
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Db 491 ccacaagaaggggagcctcctcaatgtgaagacgttgygtctctgtccaaagcacagctcttc 550
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Qy 1801 AGAAGCAAGCAACATCCACCTGGGCCACCTGTGCTTACAGAGACACTGCACAGATCCA 1860
Db 1811 agaagccagacacatccacctgt 1870
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Qy 1921 CTCTCATTTAGCCATTTTGGGCCAGATGAGCGCTTCAAGAGGCGCAGATTCGCAATCAG 1980
Db 1931 cctctccatltcaagcattttaggtcagatgaacgtctttagagggagagatgtgtgtgtgtgtgt 1990
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Db 1991 tgaaccttcgcttatgt 2050
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Qy 2221 CAGGAGCATCTCATCTGTGACGAGCCCTCATGTGCTTAAATGCCATGTGGGACACCA 2280
Db 2231 cagagacatctcatctctgt 2290
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Db 2351 ccagttacagttacctgt 2410
Qy 2401 GGAAGAGGCAACCCATGAGGAAGTGAATTTAAATGTGTGACTATGCTACATTTTAA 2460
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Db 2651 ctgtgtcagtatatgt 2710
Qy 2701 TATGGCCCTTTTCATGTAATGTATGAGAGCAGCGCTTTCAGACACCTGTGTGTAGTTA 2760
Db 2711 tatggcccttttcatgt 2770

QY	2761	CTGGATCAACGACGAGAAAGCGGGAAACCAACATGTGACTCCAGGGACAGACACTCGGTGAC	2820
Db	2771	CTGGATCAACGACGAGAAAGCGGGAAACCAACATGTGACTCCAGGGACAGACACTCGGTGAC	2830
QY	2821	TGACACCATGAAGAGACATCTCTATATGACGTACTATGACAGATCTAACCCCTCTCAT	2880
Db	2831	TGACAGCATGAAGAGAAATCCATCTATATGACGTACTATGACAGATCTAACCCCTCTCAT	2890
QY	2881	GGCAGTCATGCTGATCCTGAAAGCCATTCGAGAGTTGTCTTGTCAAGGGACAGCTGCG	2940
Db	2891	GGCAGTCATGCTGATCCTGAAAGCCATTCGAGAGTTGTCTTGTCAAGGGACAGCTGCG	2950
QY	2941	AGCTTCCTCCCGGCTCCATGACAGACGCTTTTCCAGAGATCCTTCGAAAGCCCTATGAAGTT	3000
Db	2951	AGCTTCCTCCCGGCTCCATGACAGACGCTTTTCCAGAGATCCTTCGAAAGCCCTATGAAGTT	3010
QY	3001	TTTTTGACAGACCCCCACAGAGGAGATTCACACAGATTTTCCAAACATATGGATGAAGT	3060
Db	3011	TTTTTGACAGACCCCCACAGAGGAGATTCACACAGATTTTCCAAACATATGGATGAAGT	3070
QY	3061	TGACGTGCGGCTGCGCTTCAGGCGCAGAGATGTTTCATCCAGACGTTATCCTGTGTTCTT	3120
Db	3071	TGACGTGCGGCTGCGCTTCAGGCGCAGAGATGTTTCATCCAGACGTTATCCTGTGTTCTT	3130
QY	3121	CTGTGTGGGAAATGATATGCGAGAGATCTCCCGGTGTTCTTGTGTGACAGTGGGCCCTTGT	3180
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Db	3191	CATCCTCTTTTACGTCTCTCACATTTCTTCACAGGTCCTATTTCGGAGGCTGAAAGCTCT	3250
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Db	3251	GGACAAATATCAGCAGATGCACCTTTCCCTCCACATCAGCTCCAGCATACAGGCGCTTGC	3310
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Db	3311	CACCATCCACGCGCTTACAATAAAGGGAGAGATTTCAGCAGATACAGAGAGCTGCTGGA	3370
QY	3361	TGACAAACCAAGCTCCTTTTTTTTTTTGTTTACGTGAGTCCGGTGGCTGCTGCGCGCT	3420
Db	3371	TGACAAACCAAGCTCCTTTTTTTTTTTGTTTACGTGAGTCCGGTGGCTGCTGCGCGCT	3430
QY	3421	GGACCTCATACAGATCGCCCTCATCCACACACAGGGGCTGATGATCGTTTATGACAGG	3480
Db	3431	GGACCTCATACAGATCGCCCTCATCCACACACAGGGGCTGATGATCGTTTATGACAGG	3490
QY	3481	GGAGATATCCCCCAGCCTATGCGGGGTCTCGGCATCTTATATGCTGTCCAGTTTAAAGGGCT	3540
Db	3491	GGAGATATCCCCCAGCCTATGCGGGGTCTCGGCATCTTATATGCTGTCCAGTTTAAAGGGCT	3550
QY	3541	GTTTCAGTTTACGGTGTAGAGCTGGCATCTGAGACAGAAAGCTGCAATCACCTCGGTGGAGAG	3600
Db	3551	GTTTCAGTTTACGGTGTAGAGCTGGCATCTGAGACAGAAAGCTGCAATCACCTCGGTGGAGAG	3610
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Db	3671	TCCCTTCCTCTGACTGGCCCCAGAGAGGAGAGGTGACCTTTTGAGACAGCQQAAGATGAAGTA	3730
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Db	3731	CCGAGAAAAACCTCCCTGTGCTTAAAGAAAGTATCCTTCACAGATCAAAACCTTAAAGAGA	3790
QY	3781	GATTGGCATTTGTGGGGCGGACAGAGATCAGGAAGTCTCTGCTGGGATGGCCCTCTTCCG	3840
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[illegible]

APPLICANT: Malsen, Gareth
APPLICANT: Townley, David
APPLICANT: Morris, Macdonald
APPLICANT: Valdes, Ana
TITLE OF INVENTION: Single Nucleotide Polymorphisms Associated With ADME Genes
FILE REFERENCE: GX-0013-2 P
CURRENT APPLICATION NUMBER: US/60/233,468
CURRENT FILING DATE: 2000-09-18
NUMBER OF SEQ ID NOS: 2488
SOFTWARE: PERL Program
SD ID NO: 205
LENGTH: 5838
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: misc-feature
OTHER INFORMATION: GB:AF104942
US-60-233-468-205

Query Match 98.98; Score 4792.6; DB 62; Length 5838;
Best Local Similarity 99.88; Pred. No. 0;
Matches 4809; Conservative 0; Mismatches 9; Indels 1; Gaps 1;
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OY 4741 AATTCGTACATAGCCTATATTTTACAGTGAATAATGTAAGCTGTTTATTTATTTAAAT 4800
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Db 4750 aattcgtacatagcctataatttacagtgaaatgtaaagctgttatttataataaat 4809
OY 4801 AAGCACTGTGCTAAAAAA 4819
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Db 4810 aagcactgtgctaaataca 4828

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RESULT 6
US-60-313-371-205
; Sequence 205, Application US/60313371
; GENERAL INFORMATION:
; APPLICANT: Ring, Huijun Z.
; APPLICANT: Malsen, Gareth
; APPLICANT: Townley, David
; APPLICANT: Morris, MacDonald
; TITLE OF INVENTION: Single Nucleotide Polymorphisms Associated with ADME Genes
; FILE REFERENCE: GX-0013-5 P
; CURRENT APPLICATION NUMBER: US/60/313, 371
; NUMBER OF SEQ ID NOS: 2447
; SOFTWARE: PERL Program
; SEQ ID NO 205
; LENGTH: 5838

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; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: GB:AF104942
US-60-313-371-205

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Query Match          98.9%; Score 4792.6; DB 70; Length 5838;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 4809; Conservative 0; Mismatches 9; Indels 1; Gaps 1;

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OY 1 GCGTATGCTCGGAGACCTGCTGACCGCTGCGCGCTTGTCTTGACAGAGGCGCCAG 60
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Db 11 ggtcatgtctcggagagcgtgtgtgagcggcgtgagccctcgcctcagagaatgaa 70
OY 61 GAATTTGATGTAAGTAAGTAAGTAAGTAAGTAAGTAAGTAAGTAAGTAAGTAAGTAAGTAAG 120
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Db 71 gaatttgaatgtaagtaagtaagtaagtaagtaagtaagtaagtaagtaagtaagtaag 130
OY 121 GGATATGCAATAGAAAAGATATATCATCCCACTCCGCTGGGTATAGAACTGTAGGGA 180
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Db 131 ggatatacgaatagaaaagatataatcatcccaactccgctgggtatagaaagtgtgagga 190
OY 181 GGAATACCACTCTTCTGGAGCAGCAGACAGACCGTGAAATTCAGTTGAGAACTCG 240
    |||
Db 191 ggaataccacctctcttggagcagacagacagacagacagacagacagacagacagac 250
OY 241 ACCGTTGGAATCAAGATAGCTTGGAAACAGACGCGCGAGCGAGGCGCTCTCTTGA 300
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Db 251 accgttggaatcgaagatagcttggaaacagacgagacgagacgagacgagacgagac 310
OY 301 TGGCTTCATGATTCCTACGCTCAGAACTCTGATGAGAGATCCCAAGGAAATACCA 360
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Db 311 tggcttcatagtctcagctcagaaactctgatactgagagagacatcccaaggaagtaacca 370
OY 361 TCATGGCTGATGCTGCTGTAAGCCATCCGAGACTTTCGAACACACACACACAGTGA 420
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OY 481 CCACAAGAAAGGGGAGACTCTCAATGGAAGACGTGTGTCTGTCTCCAAAGCAGAGTTTC 540
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OY 541 TGACGTGAACCTGACAGAGACTGAGAGACTGAGGCAAGAGAGCTGAATGAGTTGGGCC 600
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OY 721 ACACCTTGGGATPACCCAGGCAAGAGAGCTTAACCTGCAGTACAGCTTGTCTTATGT 780
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QY 1081 ATCAGCTGTCTTCTCTCTTTTACCCAGCAATGATGTTTGATCAGCGGCTCACAGCATP 1140
Db 1091 atcagctgttttcttacccttcttaccagcaatgattgttgcatacagcctcacagcata 1150
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QY 1261 GAAATTCGCGAGAGAGAGCGTGGATATTTGAAAAAGCCGGTACTTCCAGAGCATCAC 1320
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Db 1331 tgggt 1390
QY 1381 GACCTGTGGCTTCGATGTGACAGCAGACAGCGTTTTCACATGGTGACAGTCTTCATTC 1440
Db 1391 gacctgt 1450
QY 1441 CATGACTTTTGTCTTTGAAAGTAAACACCGTTTTCAGTAAAGTCCCTTCAGAGGCTCAGT 1500
Db 1451 catgactttgt 1510
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Db 1631 ccactccagatccagaaactcgcccaagctgaccccaaaatgaaaaagacaagaaggcg 1690
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QY 4261 GACCATTCGCCATCGCCTTGACACAGGTTTCTAGCTCCGATGAGATTTGCTGCGGCCCA 4320
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4750 aattgtacatagcctatattcttcttcttcttcttcttcttcttcttcttcttcttctt 4809
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4810 aagcactgtgctaaaaa 4828

RESULT 7
US-08-843-459-1
Sequence 1, Application US/08843459
GENERAL INFORMATION:
APPLICANT: SHYJAN, Andrew
TITLE OF INVENTION: NOVEL MULTIDRUG RESISTANCE-ASSOCIATED
TITLE OF INVENTION: POLYPEPTIDE
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: Testa, Hurwitz & Thibault
STREET: 125 High St.
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02110
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/843,459
FILING DATE:
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: PENTON, Gillian M
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: MIL-001

TELECOMMUNICATION INFORMATION:
 TELEPHONE: (617) 248-7100
 TELEFAX: (617) 248-7100
 INFORMATION FOR SEQ ID NO: 1:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 4781 base pairs
 TYPE: nucleic acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 FEATURE:
 NAME/KEY: CDS
 LOCATION: 2..4360
 US-08-843-459-1

Query Match 98.5%; Score 4775.4; DB 12; Length 4781;
 Best Local Similarity 99.8%; Pred. No. 0;
 Matches 4773; Conservative 6; Mismatches 12; Indels 0; Gaps 0;

67 TGATGTAAACCTAACAGTCTGTGAGCCCTGGAACCTCCACTCAGAGAGATGAAGGATAT 126
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 541 TGGTCTCTGCGAAGGCTGTGTGATCTTCTGCGGACACAGGCTATCTCTGTCATCCT 600
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 601 GTGCTGTATGATCAGCAGCTGGCTGCTTCACTGAGACCAAGCCTTCACTGATGTAACACT 660
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 967 GCAGAGATGTTGAGGACACAGCCGTTGGACGCTGCTGGAGAGACCCGTTGTTGC 1026
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 1207 CATTAATTTATCAAAATGATGCTGGTCAAAAGCATTTTCTCAGAGTTCAGAAAT 1266
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 1201 CCGCGAGAGAGAGCGTGGATATTGAAAAAGCCGGTACTTCCAGAGCATCACTGGGG 1260
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 1387 GGGCTTCGATCTGACAGCAGCAGAGCTTTCACAGTGGTGAAGTCTTCAATTCATGAC 1446
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 1447 TTTTGTCTTAAAGTAAACACCGTTTTCAGTAAAGTCCCTTCAGAAAGCTCACTGGCTGT 1506
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 1627 CAGTATTCAGAACTCGCCCAAGCTGACCCCAAAATGAAAAAGACAAGAGGCTTCAG 1686
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 1801 GATCCAAAGAGGTAAACTGTTGAATCTGCGCAAGTGTGGAAAGTGAAGAAACCTCTCT 1860
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3787 CATGCTGAG 3846
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3781 GAGATTAATCTGAG 3840
3907 CGACCTCCGAAGCAAACTCTATCATCTCAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3966
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Query Match 88.8%, Score 4304.4, DB 61, Length 4314;

Best Local Similarity 99.9%; Pred. No. 0; Matches 4308; Conservative 0; Mismatches 6; Indels 0; Gaps									
QY	116	ATGAGAGATATGCATATGAGAAAAGTATATCATCCAGTCCTGGTATAGAATGTC	175						
Db	1	atgaagatatcagacataagaataatatacatcccaagctcggctatagaagtgtg	60						
QY	176	AGGAGAGAACCGACGACTTCTGGGACGACACAGACCGGAAATTCACATTCAGAGGA	235						
Db	61	aggagagaaacacgacattcttggacgcacaagacgtygaagatccaagltcaaggga	120						
QY	236	ACTGACCGTTGGAAATGGCCAAAGATGGCTTGGAAACAGACCCCGAGCGGACTCTCT	295						
Db	121	actgcacgctcttgaaatgccaagaatgccttggaaacagcagcccgagccgagggcctctc	180						
QY	296	CTTGATGCCATCATGCATTTCTCAGCTCAGAAATCTTGATAGAGACATCCCAAGGAAAG	355						
Db	181	cttgatgccctcatcatctcctcagctcagaatccttgatgagcattcccaaggaaag	240						
QY	356	TACCATATGGCTTGAAGTGTCTGGAAGCCCATCCGAGCTACTTGGAAACACACAGACCA	415						
Db	241	taccatcatgtcttgatgltgctctgaaagcccatcggactactccaacacccaacca	300						
QY	416	GTGACAAATCTGGGGCTTTTCTCTATAGACTTTTCTGAGCTTCTCTCTGAGCCGT	475						
Db	301	gtgagacaatgctgggcttlttccctgtatgacttlttgctgtcttctctctgcccgt	360						
QY	476	GTGGCCCAAGAGAGGGGGAGCTCTCAATGGAAGACGTGTGTCCTGTCCAAACACAG	535						
Db	361	gtggcccaagaaggggggagctcctcaatgaaagcgtgtgtctctgtccaagacag	420						
QY	536	TCTTCTAGCGTAACATGACAGACACTAGAGAGACTGTGGCAAGAGACTGAATGAAT	595						
Db	421	tcttctacgctgacatgcagaaagactagaaagactgtgcagaagagctgaatgaat	480						
QY	596	GGGCGACAGCGTGTCCTCCGCGCAAGGATTTGTGTGATTTTGTGGCGACAGCGTCAATC	655						
Db	481	gggcgacagcgtctccctccggagaaagtgtgtgtgactctctgcgcacccagctcatc	540						
QY	656	CTGTCACTGCTGTGTCCTGATGATCAGACGACCTGCGCTTCAGTGAACGACGCTTCATG	715						
Db	541	ctgtcatctgtgtgcctgatgatcacgacgctgtgcttcatgtgagaccagctcatgt	600						
QY	716	GTGAACACCTCTTGAAGTATACCCAGGCAACAGAGTCTAACCTGCATGACGCTTGTG	775						
Db	601	gtgaacaacctgtgagtataccacgagcaacagagltcaacctgactaacgcttgtgt	660						
QY	776	TTATAGCTGGGCCCTCCCTCGACGGAATCGTCGGCTGTGGCTTGACATGACTGG	835						
Db	661	ttaagtctgggcccctccctcgacgaaatcgtgctgtgtgtgtgtgtgtgtgtgtgtgt	720						
QY	836	GCAATTGAATACGAAACCGGTGTCCCTTGCGGGGGGCCATCTTAACATGGACTTTAAG	895						
Db	721	gcatlgaattacccgaacccgtgtcgcgtcttgagggggccaatcaacatgcatlaag	780						
QY	896	AAGATCCTTAAGTTAAAGACATTTAAAGAGAAATCCCTGGGTAGCTCATCAACTTTGC	955						
Db	781	aagatcccttaagttaaagaacatlaaagaanaatccctgtgtgagctcatcaaatltgc	840						
QY	956	TTCACAGATGGCGAGAAATGTTTAGAGCAGACCGCTTGCGACGCTGTGGCTTGGAGGA	1015						
Db	841	tccaacagtgtgcagaaatgltcttgagcagcagccgtgtgcagctgtctgtctgagga	900						
QY	1016	CCGCTGTGTGCAATCTTAAGCATGATTTTAATGTAATTTCTGGAGCAACAGAGCTTC	1075						
Db	901	ccgctgtgtgcacatlaaggacatlaataaagttaattatctgtggaccacaagcttcc	960						
QY	1076	CTGGAGATCAGCTGTTTTTATCTCTTTTACCCAGCAATGATGTTGCATCAGCGCTACA	1135						
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Db 1081 gtcttacttactaataaattcaataaaatgtaagctgtgctgaagcattttctcgaagt 1140
Oy 1236 GTTCAGAAAATCCGCGAGAGAGAGCGTCGGATTTGGAAAAAGCCGGTACTTCCAGAC 1315
Db 1141 gtcaaaaaaacccgagagagagcgctcgatattgaaaaagccggtgaattccaggt 1200
Oy 1316 ATCATGTGAGGTGTGGCTCCCATTTGTGTGATTTGCCAGCGTGTGATCTTCTGT 1375
Db 1201 atcacgtgtggtgtgtgtcccatgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 1260
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Oy 1496 TCAGTGGCTGTGACAGATTTAAGATTGTCTTAATGGAAGAGCTTCACATGATAAG 1555
Db 1381 tcaagt 1440
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Db 1441 aacaaacagcagctcccaac 1500
Oy 1616 TCCTCCACTCCAGTATCCAGAACTGCGCAAGCTGACCCCAAAATGAAAAAGAACAG 1675
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 Db 3121 cgtctggaacatatcaagcagctaccccttctccacatcaagctccagatacagagtc 3180
 Oy 3296 CTTCGCACATCCACAGCGCTCAATTAAGGCGAGAGTTTCTGACAGATACAGAGCTG 3355
 Db 3181 ctgtccacacatccacgctctacaataaaggcaggaagttcttcgcacagataccagagctg 3240
 Oy 3356 CTGGATATACACCAAGCTCTTTTGTGTTTACGTGTGCGATGCGGTGGCTGCTGTG 3415
 Db 3241 ctggaatgcacacaaagctcttcttcttcttctacgtgtgcagagcgtgctgagctg 3300
 Oy 3416 CGGCTGACCTCATACAGATCGCCCTCATCACACGAGGCGGTGATGATGCTTATG 3475
 Db 3301 cgtctggaactctatcagcagctacgcctcctacacacacagggcgtgagctgtctatg 3360
 Oy 3476 CACGGCGAGATTCCTCCACGCTATGCGGTCTCGCATCTTATGCTGTCCAGTTAAG 3535
 Db 3361 cacggcagagatccccagactatggtgtcgtccatctcttctgtctgctcagtaag 3420
 Oy 3536 GGGCTGTTCCAGTTTACGGTCAAGCTGGCATGTGAGACAGAACTGCATTCACCTCGGTG 3555
 Db 3421 gggcgtgttcagttacgtacgtacgtggtcgtgagacagagctcattcactcgtg 3480
 Oy 3596 GAGAGATCATCATCTATTAAAGACTCTCTCTTGAAGACACTGCAGAAATTAAGAAC 3655
 Db 3481 gagaagatcaatacactacataaagactcgtctgtgaaagcactgcagaaatlaagaaac 3540
 Oy 3656 AAGGCTCCCTCCCTGACTGCGGCCCCAGAGAGGAGAGGTGACCTTTGAAGAACGAGAGATG 3715
 Db 3541 aaggtctccctccctgtgctgccccagagggagaggtgagaccttggagacgcagagatg 3600
 Oy 3716 AGGTACCGAAGAAACCTCCCTCTCTCTTAAAGAAAGTATCTTACAGATCAAACTTAA 3775
 Db 3601 aagttacggaagaaacccctcttcttcttaagaaagattccttcaagatacaaacctaa 3660
 Oy 3776 GAAAGATTTGGCATTTGTGGGCGGACAGATCAAGAGTCCCTGCGGGATGGCCCTC 3835
 Db 3661 gagaagatgtgcatgtggtggcgagacagatcaggaagatcctgcgtgggagatggccctc 3720
 Oy 3836 TTCCGCTGTGTGAGTTATCTGAGAGCTGATCAAGATTAAGAGTGAATCAGTAT 3895
 Db 3721 ttccgtctgtgtgagttatctgtgaggtgtcatcaagatctgagtgaggaatcaggtat 3780
 Oy 3896 ATTGGCTTGTGCGACCTTCCGAAGCAACTCTATATTTCTTCAAGAGCGGCTGTCTTC 3955
 Db 3781 atggtctgtgcgaaccccgaaagaaactctctatcatcttcccaagcggtgtcgtc 3840
 Oy 3956 AGTGGCACTGTAGATCAAAATTTGAGCCCTTCAACAGTACAGTGAAGACAGATTTGG 4015
 Db 3841 agtggcaactgtcagatcaaatgttgaccccttcaacagctactgtgaagaccgatttgg 3900
 Oy 4016 GATGCCCTGAGAGAGACACATGAAGAAATGTTGCTCAGCTACTCTGAAGACTTGAA 4075
 Db 3901 gatgcccctgtgagagacacatgaagaatgtatgtctcagctactctgaaccttgaa 3960

Oy 4076 TCTGAAGTATGAGAAATGGGGATTAACCTTCAGTGGGGGAAAGGACGCTCTGTGATA 4135
 Db 3961 tctgaagtatgagaaatgggataaacttccagtggtgggaaagggcagctctgtgtcata 4020
 Oy 4136 GCTAGAGCCCTGTCCCGCACTGTAGATTTGATTTTGTAGTGAAGCACAGCTGCCATG 4195
 Db 4021 gctagagccctgtcccgcaactgttaagatcttctgttagatgaagccacagctgcatg 4080
 Oy 4196 GACACAGAGACAGACTTATGATTTCAAGAGACCATCCGAGAAAGATTTGCACTGTACC 4255
 Db 4081 gacacagagacagacttatgtatccaagagacatccagagagatcttcagactgtacc 4140
 Oy 4256 ATGCTGACACTTGGCCATTCGCTGTACACAGGTTTATAGGCTCCGATAGATATATGTGCTG 4315
 Db 4141 atgttgaccatctgtcccatcgtcgtcacaggttctaggtctcgaataagattatgtgtg 4200
 Oy 4316 GCCCAGGAGACAGTGTGGATTTGACACCCCATCGGTCCTTGTCCAAACGACAGTTCC 4375
 Db 4201 gcccaaggacaggtgtgtgggtttgtgacaccccatcgttctcgttccaaagacagttcc 4260
 Oy 4376 CGATTCTATGCCATGTTTGTGCTGTGACAGAGAAAGGTCGCTGTCAAGGCTGA 4429
 Db 4261 cgattctatgcatgtgtgtgtgtgacagagaaaggtcgtcgaaggtgtga 4314

RESULT 10
 US-60-313-371-206
 ; Sequence 206, Application US/60313371
 ; GENERAL INFORMATION:
 ; APPLICANT: Ring, Huijun Z.
 ; APPLICANT: Malsen, Gareth
 ; APPLICANT: Tomlley, David
 ; APPLICANT: Morris, Macdonald
 ; TITLE OF INVENTION: Single Nucleotide Polymorphisms Associated With ADME Genes
 ; FILE REFERENCE: GX-0013-5 P
 ; CURRENT APPLICATION NUMBER: US/60/313,371
 ; CURRENT FILING DATE: 2001-08-16
 ; NUMBER OF SEQ ID NOS: 2447
 ; SOFTWARE: PERL Program
 ; SEQ ID NO 206
 ; LENGTH: 4314
 ; TYPE: DNA
 ; ORGANISM: Homo sapiens
 ; FEATURE:
 ; NAME/KEY: misc_feature
 ; OTHER INFORMATION: GB:AF104942.1
 US-60-313-371-206

Query Match 88.8%; Score 4304.4; DB 70; Length 4314;
 Best Local Similarity 99.9%; Pred. No. 0;
 Matches 4308; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Oy 116 ATGAAGATATTCGACATAGGAAAGATATATCATCCCGAGTCTGGGTATAGAAGTGTG 175
 Db 1 atgaagatatatgcacataagaaagatatactatcccgagctcgtgtataagaagtggtg 60
 Oy 176 AGGAGAGAAACACACACTTCTGTGGAGCCACAGAGACCGGTGAAGATTCCAAGTTTAGAGA 235
 Db 61 agggagaagaaacacactcttcgtggagcagagaaacgtgaaagttccaagttcaagaga 120
 Oy 236 ACTGACCGTTTGGATGCAAGATGCTTGGAAACAGACAGCCGACCGAGGCGCTCTCT 295
 Db 121 actgaccgtttggaatgtgcagaagatgccttggaaacagacgcccgaaggggctctct 180
 Oy 296 CTGTATGCTTCACATGATTTCTCAGTCAAGATCCTGGATGAGAGAGCATCCCAAGGGAAG 355
 Db 181 ctgtatgcttcacatgattctcagctcagaatcctgtgataagagacatcccaagggaaag 240
 Oy 356 TACCATCATGGCTTGAAGTGTCTGTAAGCCCATCCGAGCTACTTGTCAAAACACAGACCCA 415
 Db 241 taccatcatgttgagtgctgtgaagcccatccgagctacttccaaacaccagcaccca 300

|||||
Db 2461 aagcgtaagcagcagagagagcagctgtgcagctggaagaagaagcgaggttca 2520
QY 2636 GTGCGCTGTGATATATGATGTGTTCATCATCCAGGCTGTGCGGGCCCTTTGGCATTCCTG 2695
Db 2521 gtgcctcgtgcagatatagtgtctacatccaggtctggtgggcccccttggcattctctg 2580
QY 2696 GTTATTATGCGCTTTTCACTGTAATGTATGGAGCGACCGCCCTTTACAGACTGGTGGTTG 2755
Db 2581 gttactatggcccttctcagctgaatgtgagcagcgccttcagcacctgtgtgtg 2640
QY 2756 AGTTACTGATCAGAGAGAGAGCGGAGACACACTGTGACTGCGAGGAGAGAGACTGCG 2815
Db 2641 agttactcgtgtcagaaggaagcggaacacacactgtgtcgtgaggaacagagactcgt 2700
QY 2816 GTGAGTGACAGCATGGAAGGAAATCCTCATATGCGATGACTATGCGACATCTACGCCCTC 2875
Db 2701 gtgagtgcagcagcatgaaagcaatccctacatagcagtaactatgtcagacatctaacgccc 2760
QY 2876 TCCATGGCAGTCATGCGTGAATCGTGAAGGCAATCGAGAGTGTGCTTTGTTCAGAGGCGACG 2935
Db 2761 tccatggcagctcagctgcagctgcaggaagccatctcgagagatgtctctgtcgaagggcagc 2820
QY 2936 CTGCGAGCTTCTCCCGGCTGCATGACGAGCTTTTCCGAAGGATCCTTCGAAGGCCCTATG 2995
Db 2821 ctgcgagcttccctcccggtcagcatgagagacttccggaagatccttcgaaagccctatg 2880
QY 2996 AAGTTTTTGGACAGAGACCCCGACAGGAGGAGATTTCTCAACAGTTTTTCCAAAGACATGAT 3055
Db 2881 aagtttttggacagagaccccgacagagagatctctcaacagtttccaaagaaatgatat 2940
QY 3056 GAAGTTGAGCTGGGGGCGGCTTCAGGGCGAGATGTTTCAACAGATTCATCCAGAGATTCCTGCTG 3115
Db 2941 gaagttgagctggggcggttcagggcgagatggttcaacagatggttccagagcttaccctggtg 3000
QY 3116 TTCTTGTGTGGGAATGATGCGAGAGATCTCCCGTGTCTTGTGCGAGTGGGGGCC 3175
Db 3001 ttcttctgtgtggaaatgatcgagagagcttcccggtgtcttctgtgtgcaagtggtggccc 3060
QY 3176 CTGTGTACTCTCTTTTTCAGTCTGCGACATTTGTCTCCAGGGTCTCTGATTCGGAGCTAAG 3235
Db 3061 ctgtgtactctcttttcaagctccgacatgtgtctccaggggtccgtgattcggagactgaag 3120
QY 3236 CGTCTGGACAAATATACAGCGAGTCACTTTCCTCCACATCAAGCTCGAGATTCAGAGGC 3295
Db 3121 cgtctggacaaatatacagcagctacacttctctccacatcaagctcagacatacagaagc 3180
QY 3296 CTTGCCACATCCACGCGCTACAAATTAAGGCGAGAGTTCGTGCAAGATTCACAGAGCTG 3355
Db 3181 ctgtccacacatccagcgtacataaaggcaggaagttctgtgcacagataccaggaagctg 3240
QY 3356 CTGGATGACACACAGAGCTCTTTTGTGTTTGTGTTTGTGTTGAGTGGGTGGTGGCTGTG 3415
Db 3241 ctggatgacacacagagctcttcttcttcttcttcttcttcttcttcttcttcttcttctt 3300
QY 3416 CGGCTGACCTCATACAGATCGGCTCATACACACAGCGGGGCGATGATGCTTCTATG 3475
Db 3301 cggctgacccatccagacatcgccctcatcacacacaggggctgagatcggttctatg 3360
QY 3476 CAGCGGCGATTCGCCAGGCTATGCGGCTGTGCGCATCTCTTATGCTGTCCAGTTAAG 3535
Db 3361 cagcgcgagatcccccagcgtatcggtgtcgcacatctctatgtgtccagttacg 3420
QY 3536 GGGCTGTCCAGTTTACGGTTCAGACTGCGCATGTGAGACACAGAGCTGCATTCACCTCGGTG 3595
Db 3421 gggctgtccagttttagcgtcagactgtgcatctgagacaaagactcgtatccactcgtgtg 3480
QY 3596 GAGAGATCATCATCTATTAGACTCTGTCCTTGAAGACACTGCGACAGATTAAGAAC 3655
Db 3481 gagaagatacactaactaactaagactcgttcttggaaacactcgcaaatlaaagac 3540
QY 3656 AAGGTCCTCTCCCTGACTGCGCCAGAGAGAGAGTGAAGCTTTGAAGACGAGAGATG 3715
|||||

Db 3541 aaggtccctccctcctgactgccccagggagggaggtgacgttcttgagacagcagagatg 3600
QY 3716 AGTACCGAGAAAACCTTCCTCTGCTCTTAAGAAAGTATCTTCACGATCAAACTTAAA 3775
Db 3601 agttaccgagaanaacccctctctgtcttaagaaagtaltccttcaagatcaaacctlaaa 3660
QY 3776 GAGAGATTTGGCATTTGGGGGCGAGAGATCAGAGAAAGTCCCTGCGGGGATGGCCCTC 3835
Db 3661 gagaagatctgcatctgtgggggagacagatcaggaagttccctgcgtggggaatggccctc 3720
QY 3836 TTCCGTGTGTGAGTATATCTGAGGCTGCATCAAGATTGATGAGTACGATACGAT 3895
Db 3721 ttccgtctgtgtgagttatctcgtgaggtctgatacgaagttgtagtggagaaatcagtgat 3780
QY 3896 ATTGGCTTGGCGACCTTCGGAAGCAAACTCTATCATTTCTCAAGAGCGGTCTGTTC 3955
Db 3781 attggccttgcgacccctcgaaagaaactctctatctctcctaagagccggtgtgtc 3840
QY 3956 AGTGGCAGCTGTCAGATCAAAATTTGGACCCCTTCACACAGTACACTGAAGACCAATTTGG 4015
Db 3841 agtggcagctgtcagatcaaatcttgacccttcaacagatacactggaagaccagatctgg 3900
QY 4016 GATGCCCTTGAGAGAGACACATGAAGAAATGTAATGCTCAGCTACCTCTGAATCTGAA 4075
Db 3901 gatgcccttgagagagacacacatgaaagaaatgtatctgactaactccttgaacattgaa 3960
QY 4076 TCTGAAGTATGGAATGGGGATTAATTCTTCACTGGGGGAGCGCAGCTTTTGATA 4135
Db 3961 tctgaagatgtatggaatgtggaaatctctcagtggtggggaagcagctcttctgtcata 4020
QY 4136 GCTAGAGCCCTGCTCCGCGCACTGTAAGATTCGATTTTGTAGTGAAGCACAGCTGGCATG 4195
Db 4021 gctagagccctgtctcgcacatgaaatctgattctgattagatgaagccacagctgcgatg 4080
QY 4196 GACACAGAGACAGATTAATTGATTAAGAGACATCCGAGAAAGCATTTGGACACTGTACC 4255
Db 4081 gacacagagacagacttatgtattcaagagacatccgagaagacttgcagactgtacc 4140
QY 4256 ATGTGACATTTGCCCATTCGCTCTGACACAGGTTTATAGCTCCGATTAAGTATGATGCTG 4315
Db 4141 atgtgacatcttgcacatcgctgcagacaggttctaggtctcgaatagatatagtgtcgtg 4200
QY 4316 GCCCAGGAGAGGTGTGAGTGTGACACCCCATCGGTCTCTGTCACAGACAGCTTCC 4375
Db 4201 gcccaggaagagtggtgtgaggttggacaccccatcggttcttctgtccaagaaagttcc 4260
QY 4376 CGATTCTATGCCATGTTTGTGCTGTGACAGAGAACAAAGGTGCGTGTCAAGGCGCTGA 4429
Db 4261 cgattctatgcattgttctgtcgtcagagagaaggtcgtgtcgaagggctga 4314

RESULT 11
US-60-324-185-5709
; Sequence 5709, Application US/60324185
; GENERAL INFORMATION:
; APPLICANT: Morris, Macdonald
; APPLICANT: Tal, Preeti
; APPLICANT: Diep, Dinh
; TITLE OF INVENTION: METHOD FOR THE IDENTIFICATION OF SEQUENCE POLYMORPHISMS USING
; TITLE OF INVENTION: POLYNUCLEOTIDE SEQUENCE DATABASES, AND SINGLE NUCLEOTIDE
; FILE REFERENCE: GX-0019-1 P
; CURRENT APPLICATION NUMBER: US/60/324,185
; CURRENT FILING DATE: 2001-09-21
; SOFTWARE: PERL Program
; SEQ ID NO 5709
; LENGTH: 5782
; TYPE: DNA
; ORGANISM: Homo sapiens
; NAME/KEY: misc_feature
; OTHER INFORMATION: Incyte ID No: 1099526.1

US-60-324-185-5709

Query Match 81.9% Score 3969.6; DB 71; Length 5782;
Best Local Similarity 97.2%; Pred. No. 0;
Matches 4108; Conservative 0; Mismatches 4; Indels 116; Gaps 2;

QY 707 GCGTTCATAGTGAACACACCTCTTGGAGTATACCGAGCAGCAACAGCTTAACCTGCAGTAC 766
DB 571 gcttcatagtgtaaaacacctcttgtagtatacccgagcaacagatctcaaccctgcagtaac 630
QY 767 AGCTTGTTGTTAGTGTGGGCTCTCTCTGACGAAATGTCGGCTTGTTGTCGCTGCA 826
DB 631 agcttggttgtagtgctggtgctctccctgcaggaatcgtagtcttggtgcgtctgta 690
QY 827 CGAGTGGGCAATGAATTAACGAACCGGTGTCGGCTGGGGGGCCATCTAACCATG 886
DB 601 ctgacttgagcatgtaataaccgaaccggtgctgcgttcggtggggccatcttaaccatg 750
QY 887 GCATTTAAGAAAGATCCTTAAGTTAAGAAACATTAAGAAATCCCTGGGTAGGTCATC 946
DB 751 gcatttaagaagatcccttaagtttaagaacatlaaagaacatccctgggtgagctcacc 810
QY 947 AACATTTGCTCCAAACGATGGGAGAGAAATGTTGAGCGACGACCGTTGGACCTGCTG 1006
DB 811 aacatttgctccaacgagatgggagagaaatgtttgagcgacgacggttggacgctgctg 870
QY 1007 GCTGAGAGACCGGTGTTGCTCCATCTTAGGATGATTTATATGTAATTAATTCCTGGACCA 1066
DB 871 gctggaagaccggtgtgtgcatctctagagcatgataatgataatcttctggagacca 930
QY 1067 ACAGGCTTCCTGGAGTACGCTGTTTATCCCTTTTACCCGCAATATGTTTGCATCA 1126
DB 931 acaggtctccctgggagctcagcgttttataccctcttaaccgagcaatgattgtttcacata 990
QY 1127 CGGCTACAGCATATTTTCAGAGAAATGCGTGCCGACCGATGAAACGTGTCAGAG 1186
DB 991 cggctcacagcatattctcaggaanaatgctggtgcgcacagatgaaacgtgtccagaag 1050
QY 1187 ATGAATGAAGTTCCTACTTACTTAAATTTATCAAAATGTATGCTGGCTCAAGCATTT 1246
DB 1051 atgaatgaagttcttacttaactaataatlaacaaatgtaacgttgggtccaagcatlt 1110
QY 1247 TCTCAGAGATGTTCAAGAAATCCGAGAGAGAGCGTGGATTTGGAAGAAAGCCGGGTAC 1306
DB 1111 tctcagagtgctcagaagaatacccgagagagagcgctggaatctggaanaaagccgggtac 1170
QY 1307 TTCAGAGCATCAGTGTGGGTGGCTCCATTGTGTGATGATGCGACGCTGGTGACC 1366
DB 1171 ttccagagcatcactgtgtgtgtgtgtccattgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 1230
QY 1367 TTTCTGTTCATATGACCCCTGGGCTTCGATCTGACAGCAGCAGGCTTTTCAAGTGTG 1426
DB 1231 ttctctgtctatagaaccgt 1290
QY 1427 ACAGTTCATATTCATGACTTTTGTGAAAGTAAACACCGTTTTCAGTAAAGCCCTC 1486
DB 1291 acagttctcaatccatcagactttgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 1350
QY 1487 TCAGAGCGCTCAGTGGCTGTTGACAGATTTA----- 1517
DB 1351 tcagaagcctcagtgctgt 1410
QY 1518 ----- 1517
DB 1411 ttgtgtaagtgtagtgtaagccttagagctgtctccctgtgtgtgtgtgtgtgtgtgtgt 1470
QY 1518 -----AGAGTTGTTTCTAATGGAAGGTTCCACATGAT 1551
DB 1471 ttgtgacactctctacaactctctacagagctgtgtgtgtgtgtgtgtgtgtgtgtgtgt 1530
QY 1552 AAAGAACAAACGACCGCTCTCAGATCAAGATAGATGAAGATGCAACCTTGGCATG 1611
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DB 1531 aaagaacaacaccagccagcttctcatcaatgaatagatgaaatgccaacttggcatg 1590
QY 1612 GGAATCTCTCCCATCTCCAGATATCCAGAACTGCCCCAAGCTGACCCCAAAATGAAAAAGA 1671
DB 1591 ggaatctctcccatctccagatctccagacttgcgcaagcttgcaccccaaatgtaaaaaaga 1650
QY 1672 CAAGAGGGCTCCAGGGGAGAGAAAGAGAGAGGAGGAGGCTCCAGGCTAGCATCA 1731
DB 1651 caagagggcttcccaaggagcaagaagaagtgagggcagcttgcagcgacatgaacatca 1710
QY 1732 GGGGCTGCTGGCAGAGCAGAAAGGCCACCTCTCTCGAGACAGTGAAGCAGCGGCCAGTCC 1791
DB 1711 ggcgtgtctggcagagcagaagaagccaactctctcctgcagcagtgagagcgccagctcc 1770
QY 1792 CGAAGAGGAAGAAAGGACACATCTCACTGGGCCACCTGCGCTTACAGAGCACTGCA 1851
DB 1771 cgaagaggaagaaggaacacatcccaacttggccaacttgcagcttcaagagaacatgca 1830
QY 1852 CAGCATCGATCTGGAGATCCAGAGAGGTTAACTGCTTGAATCTGCGGCACTGGGAAG 1911
DB 1831 cagcatcgactcggagatcccaagaaggtaaactgtgtgaatcttgtgcagctgttggagag 1890
QY 1912 TGGAAAAACCTCTCTCATTTTCAAGCCATTTTAGCGCAGATGACGCTTCTAGAGGAGCAT 1971
DB 1891 tggaaaaacctctctcatcttcaatcccaatctttaggccaagatgaacgtcttgaagggacat 1950
QY 1972 TGCATCAGTGAACCTTCGCTTATGTGTGGCCAGCAGCGCTGATTCATGCTACTCT 2031
DB 1951 tgcaatcagtggaaccttcgcttattgtgtgcccagcagcgctgtgattctcattactct 2010
QY 2032 GAGAGCAACATCCGTTTGGGAAGAAATATATGATAAGAAATACACTCTGTGTGAA 2091
DB 2011 gagaagaacaacatccgttcttgggaagaaatatagtgaagaagaatcaactctgtctgaa 2070
QY 2092 CAGCTGCTGCTGAGGCGCTGACCTGGCCATTTCTTCCACAGCAGCACTGACGAGATTGG 2151
DB 2071 cagctgctgctgagggcctgacacttgcattcttcccgacgacgacccgagagatgtg 2130
QY 2152 AGAGCGAGAGGCAACCTGAGCGGTGGGCGAGCGCAGAGATACGCTTGGCCGGGCTT 2211
DB 2131 agagcgaggaagcaaaccttagcggtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 2190
QY 2212 GTATGTGACAGAGCATCTACATCTGTGACGACCCCTCATGCTTGTATGATGCCATGT 2271
DB 2191 gtaatagtgacagagcatctacatccctggaacgaacccctcagctgtccttagatgcccatt 2250
QY 2272 GGGCAACACATCTCAATAGTATGCTATCCGGAACATCTCAAGTCCAAAGACAGTCTGT 2331
DB 2251 gggcaaacacatcttcaatagtgctatccggaacaatctcaagttcaagacagcttctgt 2310
QY 2332 TGTACCCACAGTTAAGATACCTGCTGTGATGTGATGATGATCTTCATGAAGAGGG 2391
DB 2311 gttaccacaacgttaccagttactgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 2370
QY 2392 CTGTATTTACGGAAGAGGACCCATGAGGAAGTGTGATTTAATGTTGATATGATGAT 2451
DB 2371 ctgtatctcggaaaggaagcaccatgaaggaactgtgtgtgtgtgtgtgtgtgtgtgtgtgt 2430
QY 2452 CATTTTATAAACCCTGTTGCTGGAGAGACACCGCAGTGTGATTCATTTCAAAAAAGGA 2511
DB 2431 cattttaataaacctgt 2490
QY 2512 AACCACTGCTTCAGAGAAAGTCAAGACAGAGGCTCTTAAACAGATCATTAAGAA 2571
DB 2491 aaccagtggttccacagaagaaggtccacaagaaggttcccttaaaacagatcagtaagaa 2550
QY 2572 GGAAGAAACAGTAAAGCCAGAGGAAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 2631
DB 2551 ggaagaaagcagtaaggaaggaaggaaggaaggaaggaaggaaggaaggaaggaaggaagga 2610
QY 2632 TTCAAGTCCCTGTGATCAGTATGATGTGTATCATCCAGGCTCTGGGGGCGCCCTTGGCAT 2691
DB 2611 ttcaagtcctcgtgtcagatatagt 2670

QY 2692 CTTGGTATTATGCGCTTTTCATGCTGAATGTAGCGACGCGCTTCACGACCTGTG 2751
|||||
Db 2671 cctggtattatgccccctttcatgtcgaatgttagcagcaccgcttcacaccttg 2730
QY 2752 GTTGAAGTACTGATCAAGCAAGCAAGCGGAAACACCACCTGTGACTCGAGGAAAGAC 2811
2731 gttagtactgtatcaagaagaagcggaaacacacgtgactcgaggaaacgagac 2790
QY 2812 CTGGTATGATGACGATGAAAGACATCTCATATGCACTACTATGCGACATCTACGC 2871
2791 ctggatgtagaagcaatgaagacaatctcatatgaatgaatgacgacatctacgc 2850
QY 2872 CCTTCATGCGACGTCTGATCTGATCGTGAAGCCATTCGAGGATGCTCTTTCGAAGG 2931
2851 ccttcacatgycgactatgctatgctcgaagaagccatcgaagagctgctcttgcaagg 2910
QY 2932 CACGCTCGAGCTCTCTCCGGCTGATGACGAGCTTTTCGAAGATCTTCGAAGCC 2991
2911 cagcgtcgagcttccctccgctgacatgagcagcttccgaagatctcctcgaaagccc 2970
QY 2992 TATGAAGTTTGTGACGACGACCCCAAGGAGATTTCTCAACAGTTTCCAAAGCAT 3051
2971 tatgaagtttlttgacacgaccccaaggaagatctcaacaggtltccaaagaacat 3030
QY 3052 GGATGAAGTTGACGTGCGCTGCGCTTCAGGCGAGATGTTCAATCCAAAGCTTATCT 3111
3031 ggaatgaagttagcgtgagctgctgcgttcgaagcgaagatgtctccagaagctatcc 3090
QY 3112 GGTGTTCTTGTGTGGGAATGATCGAGAGTCTCCGTTGTTCTTGTGCGAGTGG 3171
3091 ggtgtctctctgtgtggaaatgacgagagttctccgtgtgtctctgtgagcagtg 3150
QY 3172 GCGCCCTGTATCCTCTTTCAGTCTGACATGTTCTCAAGGTTCTCTGATTCGGAGCT 3231
3151 gcccctgtatccctcttccagctccgacatgtctcgaaggtctcgtatctcgagagct 3210
QY 3232 GAAGCGTCTGACATATCAAGCAAGTACACCTTCTCTCCACATCAAGTCCAGACATA 3291
3211 gaagcgtctgacaataatcaacgaatcaacttctctccacatcaacgtccagacata 3270
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3271 gggccttgccacatccacgctctacaataaaggcagagttcttcgacagataccaga 3330
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3331 gctgctgtagaacaacaacgtcttcttctgtttagctgtgagctgctgagctggc 3390
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3391 tgtgctgctgtagactcaacgtatcgccctcatcaacaacgaggtctgtagctgtct 3450
QY 3472 TATGACAGGGCAGATTCGCCAGCCTATGCGGTCTGCGCATCTTATGCTGTACGAT 3531
3451 tatgacagggcagatctccccaagctatgctggtctgcacatctttagctgtgcagtt 3510
QY 3532 AAGGGGCTGTTCAGTTTACGTTCAGACTGCGATCTGAACACAGAACTCGATTACACTC 3591
3511 aaggggctgttcagttttagcgttcagactgtagacagaaagctcgattcacctc 3570
QY 3592 GGTGAGAGATCAATCATACATTAAGACTGTCTTGAAGACACTCGCAGAAATTA 3651
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D	b	2970	agcctccctccggtccatcagatgtagcattcccgaaagatcccttaagagccccatgaagt	3029
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D	b	3090	ggaatgtgcgtctgcgtctcccaagctgagatgattatccagaatgtaactctgtgtctc	3149
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D	b	3150	ctgtgttggaatgattgtcgtggaatcttcccatggttccctcgtgtgcgtgtgcctccct	3209
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D	b	3210	catctctctcactctccacatctgtcccaaggtctcattcgttgagtaaaagcgtt	3269
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D	b	3270	ggacaatatcagcagatctctcttccctcccatcacatcagctcattcaaggtctgcg	3329
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D	b	3330	caccatccatgacctacacaacaaagaagcagaagttttacaagatatacagaagctctgga	3389
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D	b	3390	tgaacaacaggtccctcttctcctgttccactctgtacactgtgcaatgagtgctgcgagct	3449
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D	b	3450	ggacatccatcagatgcctctgtattcacacaacgtgcctgattgtcttcacgtacg	3509
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D	b	3630	gatcaaacactatatacagaagctctctcttggaaagccctgcagaatcaagaacaagc	3689
O	y	3661	TCCCTCCCTGACTGGCGCCACAGAGAGAGTGACTTTGAGAACCCAGAGATGAGAGTA	3720
D	b	3690	tctctccccaagatgcgccccagaagggagaaagtaaccttggaaatgcagaatgaaata	3749
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D	b	3750	cgggaaaatctccctctgtgtcccttaagaaagtgctctccatccatcaagcccaaggaaaa	3809
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D	b	3810	gataagatattgttggaagaaacaggttcagggaagttcctcttgggagtgcccccttcg	3869
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D	b	3870	tctgtgtgagctatctggaagctgcacaaagattgataagaaatcaagtgacacg	3929
O	y	3901	CTTGGCGGACTCCGAGCAAACTCTATCATTTCTCCAGAGCGCGGTGCTGATGAGTGG	3960
D	b	3930	cctggtccgacctccogaagcaaacctgcacatcatctccgaagagccagtgctgctcaatgg	3989
O	y	3961	CACGTACAGATCAAAATTGAGACCCCTTCAACACATACAGTAAGAACAGATTGGATGTC	4020
D	b	3990	cactgtgaagatcaaaccttggaacctttcaacagttacaaggaagaaacagatctggaatgc	4049
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D	b	4050	tctagaagaagcaacatgaaagaaattatgtgcccaagctccctctgaaactgtgactgaa	4109

OY	4081	AGAGTAGGAGAAATGGGGATACCTTTCACAGTGGGGGAACGGCAGCTCTTGTCATAGCTAG	4140
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OY	4141	AGCCCTGCTCCGCCACGTGTAGATTCGTGATTTTATGATGAAGCCACACACTCCGATGAGCAC	4200
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OY	4261	GAACATTTGCCATCGCTGCACACAGGATTTCTAGGCTCGATGAGATTTTGGTGGCGGCCCA	4320
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OY	4381	CTATGCCATGTTTGGCTGCTGCACAGAAAGTGGCTGTGAAGGGCGATCCGCTCTGT	4440
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OY	4680	TTATTTATTAATTTG-TATCAGAGGCGTATATGAAGCTTTTACGTAGCATATATTCATAT	4738
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RESULT 13
US-60-278-258-6390
; Sequence 6390, Application US/60278258
; GENERAL INFORMATION:
; APPLICANT: Morris, MacDonald
; APPLICANT: Lal, Preeti
; APPLICANT: Diep, Dinh
; TITLE OF INVENTION: Method for the Identification of Sequence Polymorphisms Using
; TITLE OF INVENTION: Polynucleotide Sequence Databases, and Single Nucleotide
; FILE REFERENCE: GX-0010-1 P
; CURRENT APPLICATION NUMBER: US/60/278, 258
; CURRENT FILING DATE: 2001-03-23
; NUMBER OF SEQ ID NOS: 17730
; SOFTWARE: PERL Program
; SEQ ID NO 6390
; LENGTH: 4951
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc.feature
; OTHER INFORMATION: Incyte ID No: 1099526.1
US-60-278-258-6390

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	Query Match	76.5%	Score 3710.2:	DB 66;	Length 4951;
	Best Local Similarity	97.0%;	Pred. No. 0;		
	Matches 3848;	Conservative	0;	Mismatches	3; Indels 116; Gaps 2
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: GENERAL INFORMATION:			
: APPLICANT: Rosen et al.			
: TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies			
: FILE REFERENCE: P1239			
: CURRENT APPLICATION NUMBER: US/09/760,470			
: PRIORITY FILING DATE: 2001-01-16			
: Prior application data removed - consult PALM or file wrapper			
: NUMBER OF SEQ ID NOS: 89			
: SOFTWARE: PatentIn Ver. 2.0			

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; SEQ ID NO 26
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; TYPE: DNA
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Search completed: August 11, 2002, 11:01:58
Job time: 6288 sec
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GenCore version 4.5
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OM nucleic - nucleic search, using sw model

Run on: August 11, 2002, 09:18:35 ; Search time 627.48 Seconds
(without alignments)
18845.237 Million cell updates/sec

Title: US-09-528-031-1

Perfect score: 4847
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Scoring table: IDENTITY NUC
Gapop 10.0, Gapext 1.0

Searched: 1437365 seqs, 1219827628 residues

Total number of hits satisfying chosen parameters: 2874730

Minimum DB seq length: 0
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Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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2	4792.6	98.9	5838	US-10-007-925A-325	Sequence 325, App
3	4307.6	88.9	4314	US-10-154-452-1	Sequence 1, Appl1
4	3929	81.1	3978	US-10-154-452-5	Sequence 1, Appl1
5	3142	64.8	5881	US-10-172-086-81	Sequence 81, Appl
6	3011	62.1	5881	US-10-172-086-82	Sequence 82, Appl
7	768	15.8	4862	US-10-087-782A-1	Sequence 1, Appl1
8	725.4	15.0	4083	US-10-162-012-35	Sequence 35, Appl
9	725.4	15.0	4638	US-10-162-012-33	Sequence 33, Appl
10	591.8	12.2	1579	US-10-137-337-228	Sequence 228, App
11	511.2	10.5	5011	PCT-US02-07787-35	Sequence 35, Appl
12	511.2	10.5	5011	PCT-US02-07787-35	Sequence 35, Appl
13	437.4	9.0	4231	US-09-442-384B-504	Sequence 504, App
14	437.4	9.0	4231	US-09-310-213-287	Sequence 287, App
15	409.8	8.5	426	US-09-647-140A-1	Sequence 1, Appl1
16	401.4	8.3	457	US-09-918-995-28384	Sequence 3846, Ap
17	376.8	7.8	5099	US-10-191-803-60	Sequence 28384, A
18	363.6	7.5	4977	PCT-US02-18947-472	Sequence 60, Appl
19	363.6	7.5	4977	PCT-US02-18947-472	Sequence 472, App
20	362.4	7.5	4509	US-10-172-118-472	Sequence 472, App
21	356	7.3	5079	US-09-647-140A-7	Sequence 7, Appl1
22	351.6	7.3	6628	US-10-191-803-61	Sequence 5, Appl1
23	349.2	7.2	4869	US-09-935-625-26954	Sequence 61, Appl
24	344.4	7.1	4869	US-09-935-625-26571	Sequence 26954, A
25	340.8	7.0	4896	US-09-935-625-3325	Sequence 26571, A

26	340.8	7.0	4896	US-09-935-625-26040	Sequence 26040, A
27	334.6	6.9	4872	US-09-935-625-3010	Sequence 3010, Ap
28	334.6	6.9	4872	US-09-935-625-25376	Sequence 25376, A
29	306.4	6.3	1981	US-09-919-002-2634	Sequence 2634, Ap
30	301.2	6.2	4851	US-10-007-926A-324	Sequence 324, App
31	300.8	6.2	4551	US-09-935-625-5375	Sequence 5375, Ap
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33	300.8	6.2	4551	US-09-935-625-20408	Sequence 20408, A
34	300.8	6.2	4551	US-09-935-625-25429	Sequence 25429, A
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36	288.8	6.0	1098	US-10-198-717-4	Sequence 4, Appl1
37	278.4	5.7	4369	US-09-935-625-7276	Sequence 7276, Ap
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39	251.2	5.2	4566	US-09-935-625-5575	Sequence 5575, Ap
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42	251.2	5.2	4566	US-09-935-625-25853	Sequence 25853, A
43	248	5.1	4548	US-60-360-039-25324	Sequence 25324, A
44	246.4	5.1	4524	US-60-360-039-27791	Sequence 27791, A
45	232.8	4.8	4338	US-60-360-039-25928	Sequence 25928, A

ALIGNMENTS

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RESULT 1
US-09-647-140A-3
; Sequence 3, Application US/09647140A
; GENERAL INFORMATION:
; APPLICANT: Fox Chase Cancer Center
; APPLICANT: Krush, Gary D.
; APPLICANT: Lee, Kun
; APPLICANT: Belinsky, Martin G.
; APPLICANT: Bain, Lisa J.
; TITLE OF INVENTION: MRP-Related ABC Transporter Encoding
; FILE REFERENCE: FCCC 98-02
; CURRENT APPLICATION NUMBER: US/09/647,140A
; PRIOR FILING DATE: 2001-05-21
; PRIOR APPLICATION NUMBER: PCT/US99/06644
; PRIOR FILING DATE: 1999-03-26
; PRIOR APPLICATION NUMBER: 60/079,759
; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: 60/095,153
; PRIOR FILING DATE: 1998-08-03
; NUMBER OF SEQ ID NOS: 18
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 5838
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-647-140A-3

Query Match          98.9%  Score 4792.6;  DB 5;  Length 5838;
Best Local Similarity 99.8%  Pred. No. 0;
Matches 4809;  Conservative 0;  Mismatches 9;  Indels 1;  Gaps 1;
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DB	71	gaattcgaatgtgaacataacagctgtgagccctcgtaacctcgtaagaagatgaa	130
QY	121	GGATATGACACTAGAAAGAGTATATCATCCAGTCCGATGATGAAATGAGAGGA	180
DB	131	ggatatagacataagaaagagatatacatcccaagctccggatataaagtgtgaagga	190
QY	181	GAGAACGACGACTTCTGAGGAGCAGAGACCGTGAAGATTCAAGTTTCAGAGAACTCG	240
DB	191	gagaaacgacacttctgagagcagagacgcgtgaagattccaagttcagagaactcg	250

QY 241 ACCGTTGATGCGCAAGATGCTTGGAAACAGACGCCGAGGGCTCTCTCTGA 300
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RESULT 2
US-10-007-926A-325
Sequence 325, Application US/10007926A
GENERAL INFORMATION:
APPLICANT: BERTUCCI, FRANCOIS
APPLICANT: HOUIGATTE, REMI
APPLICANT: BIRNBAUM, DANIEL
APPLICANT: NGUYEN, CATHERINE
APPLICANT: VIENS, PATRICE
APPLICANT: FERRI, VINCENT
TITLE OF INVENTION: GENE EXPRESSION PROFILING OF PRIMARY BREAST CARCINOMAS
TITLE OF INVENTION: USING ARRAYS OF CANDIDATE GENES
FILE REFERENCE: 1546-R-00
CURRENT APPLICATION NUMBER: US/10/007, 926A
CURRENT FILING DATE: 2001-12-07
PRIOR APPLICATION NUMBER: 60/254, 090
PRIOR FILING DATE: 2000-12-08
NUMBER OF SEQ ID NOS: 468
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 325
LENGTH: 5838
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE: atp-binding cassette, sub-family c
OTHER INFORMATION: (citr/mrp), member 5 (ABCC5) gene.
US-10-007-926A-325

Query Match 98.9%; Score 4792.6; DB 7; Length 5838;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 4809; Conservative 0; Mismatches 9; Indels 1; Gaps 1;

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US-10-154-452-5
Sequence 5, Application US/10154452
GENERAL INFORMATION:
APPLICANT: Relner, Peter B.
APPLICANT: Roy, Josee
APPLICANT: Conop, Bruce P.
TITLE OF INVENTION: INCREASED FUNCTIONAL ACTIVITY AND/OR
TITLE OF INVENTION: EXPRESSION OF ABC TRANSPORTERS PROTECTS AGAINST THE LOSS OF
TITLE OF INVENTION: DOPAMINE NEURONS ASSOCIATED WITH PARKINSON'S DISEASE
FILE REFERENCE: 100103.420
CURRENT APPLICATION NUMBER: US/10/154.452
CURRENT FILING DATE: 2002-05-22
NUMBER OF SEQ ID NOS: 9
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 5
LENGTH: 3978
TYPE: DNA
ORGANISM: Homo sapiens
US-10-154-452-5

Query Match 81.1%; Score 3929; DB 7; Length 3978;
Best Local Similarity 99.9%; Pred. NO. 0;
Matches 3932; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

Q 116 ATGAAGATATGACATATGAAAGATATATCATCCCGAGCTCGGTATTAAGTGTG 175
D 1 atgagagatatacgacataagaaagatatacatcccaagctcctggtatagaagtgtg 60
Q 176 AGGAGAGAACCCAGCTTCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 235
D 61 agggagagaaacagacttctgagcagcagagagacgltgaagattccaagltcagaga 120
Q 236 ACTGACCGTTGGAATGCGAAGATGCTTGAAGACGAGCCGAGCGAGGCTCTCT 295
D 121 actgacccgttggatgacagagatgcttggaaacaagcagccgagcgagcgctctct 180
Q 296 CTGATGCTTCATGATGATTCAGCTCAGATCTGATGATGATGATGATGATGATGATG 355

D	181	cttagagccccaatgcatcttcacgctccagaatccctgatacgagagacatcccaaggaaaag	240
O	356	TACCAATCATGGCTTGAAGTGTCTGTAAGACCCATCCGGACTACTTGTCAACACGACACCA	415
D	241	taccatcatgtcttagtgctctcgaagccatccgactactctcaaacacagcaacca	300
O	416	GTGGACAATGCTGGGCTTTTTCCTGTATGACTTTTTCGTGGCTTCTCTCGGCCGT	475
D	301	gttgaaacaatgtggtgcttcttcctcgtatgactcttcctgcttggtcttctctctgccc	360
O	476	GTGGCCACACAAGAGGGGAGCTCTCAATGGAAGACGTGGGTCTGTGCCAAGCAGCG	535
D	361	gtggccacaagaagggggagcctctaaatggaagacgtgtgctctctgcacgaacgag	420
O	536	TCTTCTGACGTGAATCTGACAGACACTAGAGAGACTGTGGCAAGAAAGCTGATGAATT	595
D	421	tctctgacgtgaaatcgtacagaagaactagaagagctgtgcaagaagaatgtatgaatt	480
O	596	GGGCGAAGCCCTGCTTCCCTCGCAAGGCTTGTGATCTTCTGCCACACAGGCTCATC	655
D	481	gggcacgaacgtcttccctcgtcgaaaggttgttgatctctctgcgcgcacagctcattc	540
O	656	CTGTGCATCTGTGGCCGATGATCAGCGAGCTGGGTGGCTCAAGTGGACACGCTTCATG	715
D	541	ctgtgccacgtgtgcctcgtatgatacgaacgacgctgtgcgtctcagttgagacacgtctca	600
O	716	GTGAAACACCTTGTGGAGTATACCCAGGCAACAGACTCAACCTGCAATGACAGCTTGTG	775
D	601	gtgaaacaacctcttgtagatatacccaagcaacagagctctaaactgaaagaacgttgtg	660
O	776	TTAGTGTGGGCTCCTCCTCTGACGGAATCTGCGGTCTTGTGCTGCTTGCATGACTTGG	835
D	661	ttagtctgtggcctctcctcgtacggaatctgtgctgtgttgcttgactgactgttg	720
O	836	GCATTGAATACGAACCGGTGTCCCTTCCGGGGGGCATCCTATACCATGGCATTTAAG	895
D	721	gcatctgaattacggaacggtgtctgcgtctgcgggggacatcccaacatggtcatttaag	780
O	896	AAGATCCTTAACTTAAAGACATTTAAAGAAATCCCTGGGTGACGTCAATCAANTTTC	955
D	781	aagaatccttaagttaaagaacatlaaagaagaaatccctgtgtgtagtctcaacatttgc	840
O	956	TCCAAGATGGGAGAGAATGTTTGAAGCAGACCGCTTGGACCGCTGTGGCTGGAGA	1011
D	841	tccaagatgtggaagagaatgtcttgaggcagcgccgtgtgcagctgtgtcttgagga	900
O	1016	CCGCTTGTGCCATCTTAGCATGATTTATATGTATTTATTTCTGGGACCAAGGCTTC	1077
D	901	cccgctgtgtccatcttaagcatgatttaatagtatattctctgtgaccaacagcgttc	960
O	1076	CTGGGATCAGACTGTTTTTATCCCTTTTACCACGAATGATGTTTTCATCAGGGCTCA	1133
D	961	ctgggaacagctgttcttataccctctcttaccgaagaaatgttctgatacagcgtccaa	1020
O	1136	GCATATTTTCAGAGAAATCTGTGGCCGACACGATGAAGAAAGTGTCCAGAAAGTGAATGA	1195
D	1021	gcaatattcagggaaaatgtgctgtgcgcacaggaatgaacgtgtctcagaagaatgaatga	1080
O	1196	GTTCCTTACCTTACATTAATTTATCAAAATGTATGCTGTGGTCAAAACATTTTCTCAGAT	1255
D	1081	gtctctactacatlaaattatcaaaaatgtatgtcctgtgtcaaaacattcttcagagt	1144
O	1256	GTTCAGAAATCCGCGAGGAGGAGCGCTCGGATTTTGGAAAAACCGGTATCTCCAGAC	1311
D	1141	gttcagaanaatccgcgagggagagctctggaatactggaanaaacgctgtgtacttcagaagc	1200
O	1316	ATCACTGTGGGTGTGGCTCCATTTGTGTGTGTATTTGCCAGCGTGGTGCATTTCTGT	1377
D	1201	atacaatgtgggtgtgtgtcccatgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt	1260
O	1376	CATATGACCTGGGCTTGCATCTGACAGCAGCAGGCTTTACAGTGTGACAGTCTTC	1433

Db	1261	catltagcccttggcttcgactcgtacgaagcaacagcttccacagctgtgtgacagcttc	1320
Qy	1436	AATTCATGACCTTTTGCTTTGAAAGTAACACCGTTTTCATGTAAGTCCCTCTCAGAACCC	1495
Db	1321	aattccatgactcttgccttctgtgaagaataacacgcttcttcagtaaaagctccctcccaagacc	1380
Qy	1496	TCAATGGCTGTTCACAGATTTAAGACTTTTGTTTCTTAATGGAGAGGTTTCAACTGTATAAG	1555
Db	1381	tcagctgctgtctgacagatttaagattctgtcttctaagtaagaggttccaatgtacaag	1440
Qy	1556	AACAAACACACCCAGTCCCTCATCATCAAGATATGAGATGAAAAAATGCCACTTTGGACATGGGAC	1615
Db	1441	aacaaacacgacgctcctccatcaagaatagaaatgaaataatgccaacttgcataagggac	1500
Qy	1616	TCCTCCCACTTCAGTATTCAGAACTCGCCCAAGCTGACCCCAAAATGAAAAAAGACAAAG	1675
Db	1501	tcctcccaactccagiatccagaaactcgcccaagctgaccccccaaatgaaaaaagacaag	1560
Qy	1676	AGGGCTTCCAGGGGGCAAGAAAGAGAGTGAGGACGCTCACCGCATCTGACATCAGGCG	1735
Db	1561	aaggcttcccaagggacaagaagaagaaagtgtaagcagctgtacgacatgacataagcg	1620
Qy	1736	GTGCTGGCACAGGACAGAAAGGCCACCTCCCTCCCTGACAGACAGACGGGCCAGTCCGAA	1795
Db	1621	gtgcgtggcagaagacaagaagaagccaccctccctcggacaagtgacgacgacgcccagctccgaa	1680
Qy	1796	GAGCAAAAGACGACAGACATCATCCACTGGGGCCACTTCGCGCTTCACAGAGACACTGCACAGC	1855
Db	1681	gaggaaagaagacaagaacatccacatccacctcggccacactcgtcttaacagagacactgacacgc	1740
Qy	1856	ATCGATTTGGAGATCCAAAGAGGTTAAACTGTGTTGGATTTGCGGCACTGTGGGAAGTGA	1915
Db	1741	atcgatctggagatccaaagaggtaaacactggttgcagatctgtgcagtgctgtggaagtga	1800
Qy	1916	AAAACCTCTCTCATTTCAGCATTTTAAAGCCAGATGAGACGCTCTTGAGGGACGACTTGCA	1975
Db	1801	aaaacctctctcatcttcaagacatlltaaggccagaaagacgcttctagaaggcagcatgtca	1860
Qy	1976	ATCAGTGGACCTTTCGCTTATGTGTGGCCAGCAGAGGCTGGATCTCTAAAGCTACTCTGAGA	2035
Db	1861	atcagtgaaactcttgcttatatgtgcccacagcgcttgatcttccataatgctacactctgga	1920
Qy	2036	GACAACTCTGTTTGGGAAGATATGATGAAGAAAGATACACTCTGTGCTGAACAGC	2095
Db	1921	gacaacatctcgttctgtggaaagataatgataagaaagaatacaactctgtcgtgacagc	1980
Qy	2096	TGCTGCTGAGGCGCTGACCTGCGGCATTTCTCCAGAGAGACCTACAGGAATTGGAAAG	2155
Db	1981	tgctgctcgtgagccttgacactgtgcattcttcccaagaagcaactgaacgaaatttggagag	2040
Qy	2156	CGAAGACCAACCCGAGCGGTGGGACGGCCGACAGAGATACGCTTGCCGGGCGCTTGAT	2215
Db	2041	cgaagagccaacctgaaacggttggtgacgacgcccagaagatcagactctgcccgggcttgcata	2100
Qy	2216	AGTGACAGGAGCATCTACATCTCGAGACGACCCCTTAGTGCCCTTAGATGCCATGTGGGC	2275
Db	2101	agtgtacagagcatctacataccctcgagacgacccctcaatgagcttagatgtgccatgtgggc	2160
Qy	2276	AACCACTCTTCAATAGTGTATTCGGAAACATCTCAAGTCCACAGACATTTCTGTTTGT	2335
Db	2161	aaccacatcttcaatagtgatctacggaacaactlcaagtlccaagaacagcttctgttct	2220
Qy	2336	ACCACACAGTTACAGTACCTCGTTGATGACTGATGAAAGTATTCATGAAGAGGGCGTG	2395
Db	2221	aaccacacagtltaacagtaacctggttgcactgtgtgaagatgtaacatgaagaaagggcgct	2280
Qy	2396	ATTACGGAAGAGGACACCCATGAGGAACGATGAATTTAAATGTGACATATCTACATT	2455
Db	2281	attacggaagaagagcacaccatgtggagacatgtaatttaaatgtgactatgtctacactt	2340
Qy	2456	TTTATATTAAGCTGTTGCTGGGACAGACACGCCCATGTTGAGATCAATTTCAAAAAGGAAC	2515
Db	2341	tttaataaacctgtctgtggaagagacaacgcaagtgtgaatcaatctcaaaaaaggaaac	2400

QY 2516 AGTGTTCACAGAGAGTACAGAACGAGTCTTAAACAGATCATTAAGAGAA 2575
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Db 2401 agtgggttcacagaagaagtaacaagaaggtccctaaacagatcaagtaagaagaa 2460
QY 2576 AAAGCAGTAAAGCCAGAGAGAGGAGCTTGTTCAGCTGGAAAGAGAGGCTTCA 2635
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Db 2461 aaagcagtaagaagcagaaggaagcagcttgtagcagctggaagaagaagggcaggttca 2520
QY 2636 GTGCCCTGGTCAATATGCTGTCTACATCCAGCTGTGGGGGCCCTTGACATTCCTG 2695
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Db 2521 gtgacctggtcagatagatggtgtctacacacagctcgtagggcccttgatccctg 2580
QY 2696 GTTATATAGGCCCTTTCATGCTGATGTAGAGAGACCGCTTTCAGACCTGTGTGTTG 2755
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Db 2581 gttataatggcccttccttcagtgaaatgtagaagacacgaccttcagccctggtgtg 2640
QY 2756 AGTTACTGATCAAGCAAGAGAGCGGAGACACACTGTGACTTGAAGAGAGAGACTCTG 2815
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Db 2641 agttactgataagaagaagcagcggaacacacactgtagctcggaaggaagcagactcg 2700
QY 2816 GTGAGTGAACAGATGAAGAGCAATCTCATATGCACTACTAGCCAGCTTACGCCCTC 2875
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Db 2701 gtgagtgacaagatagaagacaatcctcatatgacgtactatgccccatctacgcccc 2760
QY 2876 TCCATGAGCATGCTGATGCTGAAAGCATTCGAGAGTGTGTTCATGAGGGCAGC 2935
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QY 2936 GTGCGAGCTTCTCCCGGCTGATGAGAGCTTTTCGAGAGAGTCCCTTGAAGCCCTATG 2995
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Db 2821 ctgagagcttcctccggtgcatgacgagcttccgaaagatcctctgaaagcctatg 2880
QY 2996 AAGTTTGTGACAGAGAGAGAGAGAGATTTCAACAGTTTTCAGAGCATGAT 3055
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Db 2881 aagtttlttgacaagagagagagagagatttccaaggttltccaagacatgagat 2940
QY 3056 GAAGTTGAGCTGCGGCTGCTTCCAGGCGAGATGTTCATCCAGAGCTTATCCGGTG 3115
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Db 3001 tctctctgtgtgag 3060
QY 3176 GTTGTGATCCTGCTTTCATCTCTGACATGTGTCTCAGAGGCTCTGATGGAGCTGAAG 3235
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Db 3061 ctgtgcatcctctctcagctcctgacatgtctcagagagagagagagagagagagag 3120
QY 3236 CGTCTGACAAATATCAGAGAGTCACTTCTCTCCACATCAGGTCAGAGCATACAGAGC 3295
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Db 3121 cgtctggaataatacaag 3180
QY 3296 CTTCGCCACCATCACGCTTACAATAAGGAGAGATTTCTCCACAGATACAGAGAGCTG 3355
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QY 3356 CTGGATGACAAACAGAGCTCTTTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG 3415
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QY 3536 GGGCTGTTCAGTTTACGCTAGACTGAGATCTGAGACAGAGAGCTGATTCACCTCGGTG 3595
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Db 3541 aaggtccctccctgactgag 3600
QY 3716 AGGTACGAGAAACCTCCCTCTGTCCTTAAAGAGTATCTTTCAGATCAAACTTAA 3775
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Db 3601 aggtaccagaaactccctcctctcgtcctaaagaagatctcctcaagatcaactaa 3660
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Db 3661 gagaagatgagacatgtagggcggaagagagagagagagagagagagagagagagag 3720
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Db 3721 ttcgctctgtagagatctatcctgagagagagagagagagagagagagagagagagag 3780
QY 3896 ATTGGCTTGGCGACCTCCGAGCAAACTCTATCATTCCTCAAGAGCGGTGCTGTTC 3955
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Db 3781 attgaccttgccgacctccgaagcaactctctatctatctcctcaagagccggtgctgtc 3840
QY 3956 AGTGGACATGTGATCAATTTTGGAGCCCTTAAACATGACTGATCAAGACAGATTGG 4015
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Db 3841 agtggacatgtag 3900
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Db 3901 gatgccctggag 3937

RESULT 5
US-10-172-086-81
; Sequence 81, Application US/10172086
; GENERAL INFORMATION:
; APPLICANT: Epigenomics AG
; TITLE OF INVENTION: Method and nucleic acids for the differentiation
; FILE REFERENCE:
; CURRENT APPLICATION NUMBER: US/10/172,086
; CURRENT FILING DATE: 2002-06-13
; NUMBER OF SEQ ID NOS: 116
; SEQ ID NO 81
; LENGTH: 5881
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)
US-10-172-086-81

Query Match 64.8%; Score 3142; DB 7; Length 5881;
Best Local Similarity 78.5%; Pred No. 0;
Matches 3774; Conservative 0; Mismatches 1035; Indels 1; Gaps 1;
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Db 91 tcggagcggtgtagcggttgtagcggttgtagcggttgtagcggttgtagcggttgtagcggt 150
QY 70 TGTGAACCTAACAGTGTGTGAGCCTTGAACTCCACTGAGAGAGATGAAGATATGCA 129
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Db 151 tgtgaatcaatgaagttgtgagcttgtagatcttattataggaagatgaagatatacga 210
QY 130 CATGAGAAAGATATATATCCAGTCCCGAGGATATCAAGTGTGAGGAGAGAGAACAG 189
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Db 211 tataggaagagatataatctttagtttgtagtagaaggtgtagagagagagagagag 270
QY 190 CACTTCTGGAGAGCAG 249
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Qy 997 GAGCGCGTGGGTGGAGGAGCCGTTGTCCTCATCTTAGCAGATATTAAATGATTAAT 1056
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Dh 1821 ----- 1820
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Dh 1874 cagccttagagatgcctcccggtccagagaagaagaagaagaagaagaagaagaagaaga 1928
Qy 1837 ACAGAGGACATGACAGCATGATCGATGAGATCCAGAGGGTAACTGTGTTGAATGTG 1896
Dh 1929 -----ttgcacaagaatcaacctgtgtgtgtccaaaggtgagatgattgaaggtgtgt 1978
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Dh 1979 cggaaacaacgggtggtgtaagagacagcctgtgtcagccaccccgagagagagacactt 2038
Qy 1957 TCTAGAGGACAGATTCATCAATCACTGGAACCTTGCTTATGTGGCCAGCAGCCTGGAT 2016
Dh 2039 gctcgaaggtcgt 2088
Qy 2017 CCTCAATGCTACTGTGAGAGACATCTGTTTGGAGAGATATGATGAGAAAGATA 2076
Dh 2099 cgtcaaggtggaacacacaggtgagacacacacacacacacacacacacacacacacacac 2158

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Dh 2639 ggaagagttctcacaaggaatgctgt-----gcccgaagatcaagctcacaacaggaaga 2692
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Dh 2693 ggaagatggaagaagctcctgtgagtgaggtgtctacacacacacacacacacacacacac 2752
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Dh 2933 ctacagctgt 2992
Qy 2914 AGTGTCTTTGTCAAGGAGGACGCTGCGAGCTTCTCCGCTGCAATGAGAGCTTTTCCG 2973
Dh 2993 aggaatttccacaagaagcagaagaagacacacacacacacacacacacacacacacacacac 3052
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Dh 3113 ctgtcttcgagaggaacttggaaacagcgtggaacacacacacacacacacacacacacacac 3172
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Dh 3173 cctgtctcgtccttaagt 3232

QY 3154 GTTCTTGGGAGGAGGGGCCCCCTTGTCATCTCTTTAGTCTGACATATGTCACG 3213
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Db 3233 tatctgttaalggagccataatacatgtgttatcttgcttcaattatattatgtgttcaa 3292
QY 3214 GGTCCGATTCGGGAGCTAAGCGTGTGACAAATATACGAGCTACCTTCTCTCCCA 3273
- - - - -
Db 3293 gaagagccatcgtgtgttcaaaagagactggaactaagaacggtcccttattcccca 3352
QY 3274 CATACAGTCCAGCATACGAGCTGCTGATGACAAACCAAGCTCTTTTGTGTTACGTC 3333
||||| - - - - -
Db 3353 catctccatctctctgcaagagccttgagctccatccatctgctatgaaactgaagactt 3412
QY 3334 TCTGCACAGATACGAGAGCTGCTGATGACAAACCAAGCTCTTTTGTGTTACGTC 3393
- - - - -
Db 3413 catcagccagtttaagagagctgactgactgcaagaataactactgctgtgttctatc 3472
QY 3394 TCGGATGCGGTGGCTGCTGCTGCTGACCTCATACAGCTGCCCCATACACACAC 3453
- - - - -
Db 3473 ttcacacagatgagtgactgagctggaatcatgaccacactgtgacttggactgtgt 3532
QY 3454 GGGGCTGATGATGCTTCTTATGACAGGGGAGATTCGCCAGCCCTATGCGGCTGCGCAT 3513
- - - - -
Db 3533 tgccctgttcgtgcttcttggaattctccacccttactctctttaaagtaactggtgt 3592
QY 3514 CTCTTATGCTGTTCAGTTAAGCGGGGCTGTTCAGTTTACGTCAGACTGAGATGAGAC 3573
- - - - -
Db 3593 caacatcgctgctgagctgtgctccagcttccagctccagctgcccgaattggtctgagac 3652
QY 3574 AGAAGCTGCATTCACCTCGCTGAGAGATCAATCACTAATTAAGACTCTGCTTGGGA 3633
- - - - -
Db 3653 agagcgacagcttcaagcgtgtagagagactgacagtaataagatgtgtgtctcga 3712
QY 3634 AGCAGCTGCGCAGATTAACAAGGCTCCCTCCCTGACTGGGCCAGAGGAGAGAGT 3693
- - - - -
Db 3713 agctctcttaacacatggaagcacaagtgctcccgagggtgagccacatgaggaat 3772
QY 3694 GACCTTTGAGAACGCGAGAGATGAGTACCGAGAAACCTCCCTGCTCTTAAGAAAGT 3753
- - - - -
Db 3773 catattcagatatacatgaataacagagacacacacacacggtgttcaagact 3832
QY 3754 ATCCTTCACGATCAAACTAAAGAGAGATGAGTGGGGGACACAGATCAGGGA 3813
- - - - -
Db 3833 caacctgacacatccgagccagaaagtggtgagcaltgaggaagacggtcctgga 3892
QY 3814 GTCCTGCGGGGAGGGGCTCTCCGCTGCTGAGTATGAGAGCTGCTCAAGT 3873
- - - - -
Db 3893 gtcctccttggagcagtgctctccgctgtgagccatgagcaggtgaltctcat 3952
QY 3874 TGATGAGTGAAGATCAGATGATTTGGCTTGCGGAGCTCCGAGGAAACTCTATCAT 3933
- - - - -
Db 3953 tgaagcggtgagacatttgacatgagcctgagagacttggttcaagctcagtgat 4012
QY 3934 TCCCTAAGAGCCGCTGCTTCAAGTGGACCTGTGAGATCAAAATTTGACCCCTTCAACA 3993
- - - - -
Db 4013 cccctcaagatccagtgctctcaggaacatcagatccaactagatcccttgaacg 4072
QY 3994 GTACACTGAAGCCAGATTTGGGATGCCCTGAGAGAGACACACATTAAGAAATGATTCG 4053
- - - - -
Db 4073 tcaacctgacagcagatctggaatgacttggaagagacatctctccaagaagccatctc 4132
QY 4054 TCAGCTACTCTGAACCTTGAATCTGAATCTGAATGAGAGATGGGAGAACTTCTCATGGG 4113
- - - - -
Db 4133 aaagtcccaaaaagctgcatatacagatgtgtgtgaaacggtgaaacttctctgtgag 4192
QY 4114 GGAAGCGGAGCTTGTGATAGTACAGCCCTGCTCCGACCTGTAAGATTTGATTTT 4173
- - - - -
Db 4193 ggaagagcgagctgctgacttgccagggctgtgctgcaactccaagatcatctctat 4252
QY 4174 AGATGAAGCCACAGCTGACGATGAGACACAGACAGCTTATGATTCAGAGACCTCCG 4233
- - - - -
Db 4253 cgatgaaagccacagctccatctgacatggaagagacacccgtgactccagcaactcag 4312
QY 4234 AGAAGCATTTGACAGCTGTACATGCTGACCATTTGCCATGCGCTGACACAGGTTCTAGG 4293

Db 4313 tgaagcttccacagagctgcaacgctgtctgcatctgcccacagctgtaaccactgtgtgaa 4372
QY 4294 CTCGATAGATATATGCTGTGGCCAGGAGACAGGTGTGAGATTTGACACCCCATCGT 4353
- - - - -
Db 4373 ctgtgaccacatctctgttatggaatggaagagtgtagaaattgatacgccggaagt 4432
QY 4354 CCTTCTGTCACAGCATTCGCCGATTCATGCTGATGCTTGTGCTGCTGC 4401
- - - - -
Db 4433 actcggaagaagccctggtatctgttgcagaccctcaatgagccacagc 4480

RESULT 8

US-10-162-012-35

Sequence 35, Application US/10162012

GENERAL INFORMATION:

APPLICANT: Curtiss, Rory A.J.

APPLICANT: Slios-Santiago, Immaculada

APPLICANT: Gu, Wei

TITLE OF INVENTION: NOVEL HUMAN ION CHANNEL AND TRANSPORTER FAMILY MEMBERS

FILE REFERENCE: 10448-190001

CURRENT APPLICATION NUMBER: US/10/162,012

CURRENT FILING DATE: 2002-06-04

PRIOR APPLICATION NUMBER: US 60/209,845

PRIOR FILING DATE: 2000-06-06

PRIOR APPLICATION NUMBER: US 09/875,321

PRIOR FILING DATE: 2001-06-06

PRIOR APPLICATION NUMBER: PCT/US01/18340

PRIOR FILING DATE: 2001-06-06

PRIOR APPLICATION NUMBER: US 60/209,257

PRIOR FILING DATE: 2000-06-05

PRIOR APPLICATION NUMBER: US 09/875,423

PRIOR FILING DATE: 2001-06-05

PRIOR APPLICATION NUMBER: PCT/US01/18398

PRIOR FILING DATE: 2001-06-05

PRIOR APPLICATION NUMBER: US 60/209,238

PRIOR FILING DATE: 2000-06-05

PRIOR APPLICATION NUMBER: US 09/875,363

PRIOR FILING DATE: 2001-06-05

PRIOR APPLICATION NUMBER: PCT/US01/18247

PRIOR FILING DATE: 2001-06-05

PRIOR APPLICATION NUMBER: US 60/227,068

PRIOR FILING DATE: 2000-08-22

PRIOR APPLICATION NUMBER: US 09/928,530

PRIOR FILING DATE: 2001-08-13

PRIOR APPLICATION NUMBER: PCT/US01/25475

PRIOR FILING DATE: 2001-08-15

PRIOR APPLICATION NUMBER: US 60/226,770

PRIOR FILING DATE: 2000-08-21

PRIOR APPLICATION NUMBER: US 09/934,421

PRIOR FILING DATE: 2001-08-21

PRIOR APPLICATION NUMBER: PCT/US01/26096

PRIOR FILING DATE: 2001-08-21

PRIOR APPLICATION NUMBER: US 60/279,281

PRIOR FILING DATE: 2001-03-28

PRIOR APPLICATION NUMBER: US 10/109,029

PRIOR FILING DATE: 2002-03-28

PRIOR APPLICATION NUMBER: PCT/US02/09728

PRIOR FILING DATE: 2002-03-28

PRIOR APPLICATION NUMBER: US 60/290,288

PRIOR FILING DATE: 2001-05-11

PRIOR APPLICATION NUMBER: US (not assigned)

NUMBER OF SEQ ID NOS: 48

SOFTWARE: FASTA for Windows Version 4.0

SEQ ID NO 35

LENGTH: 4083

TYPE: DNA

ORGANISM: Homo sapiens

US-10-162-012-35

Query Match

15.0%; Score 725.4; DB 7; Length 4083;

Best Local Similarity 55.8%; Pred. No. 1.1e-129;
Matches 1427; Conservative 0; Mismatches 1121; Indels 9; Gaps 2.

[illegible]

Db	2528	tgtacgggctcaaacgcgacctgctccctacatcgtgtgtg99gctgctccctcaggaatttca	2587
QY	2925	TCAAAGGACAGCCTGCGAGCTTCTCTCCGCGCTGCATGAGAGACTTTTCCGAAGAGCTTCC	2984
Db	2588	ccaagtcaagagaaggaagcattcaacgcgcgcgcgcacaaagaactctctcaacaagttttcc	2647
QY	2995	GAAGCCCTATGATAAGTTTTTTTACACAGACCCCCACAGGAGGAGATTCCTCAACAGTTTTCCA	3044
Db	2648	gctgcgccatgaattcttcttgacacacatcccaatagagcggcttcttgacgtcttcgag	2707
QY	3045	AAGACATGATGAAGATTGACGTGGGGCGTGTCCAGGCCGAGATGTTCATCCAGAACG	3104
Db	2708	ggagctctggaaacagctctggaaacagcctctgcgcacacttccagcaggtcttcgttcgt	2767
QY	3105	TTAATCCTGTGTCTTCTGTGTGTGGAAATGATGCGAGAGATTTCTCCGCGTGTCTGTGGG	3164
Db	2768	ccttaatggtgatgcgcgcttcgttctgtatgttcagtggtctctccatatactcgtttaa	2827
QY	3165	CAGTGGGGCCCCCTTGTCATCCTCTTTTCAGTCGACATTTGTCGACAGGCTCTGTATTC	3224
Db	2828	tgg9agccataatcatgttatctgtcttcattatlatatgatgttcaagaagccatcg	2887
QY	3225	GGGAGCTGAAGCCGTGGAGCAATTCAGACGACGTACACTTTCTCTCCACATCAGTCCCA	3284
Db	2888	gttgtgtccaagaagagctgg9aatactatagccggtctcttattctccacactccat	2947
QY	3285	GCAATACAGGGGCTTGGCCACCATCCACCCCTACATTAAGGGCAGAGATTTCTGCACAGAT	3344
Db	2948	ctctcgcaagccctgagctccatccatigtctatg9aaaacttgaaagacttcaatcgccagt	3007
QY	3345	ACCAGAGAGCTGCTGATGACAAACCAAGCTCTTTTGTTTTGTTCAGTGTGCGATGCGGT	3404
Db	3008	ttaagagcctgacgtacgtacgtcgagaataactacactgctgtgttctlatcttccacacagt	3067
QY	3405	GGCTGCGTGTGCGGGCTGAGCTCATGCAATGCGCCCTACACACACAGGGGCGTGTATGA	3464
Db	3068	ggatgtgcatgttaggctcgtg9aatactatgacacacttggaccttgcgctgttcctgtcg	3127
QY	3465	TCGTTCTTATGCAAGGGCAGATTCCCCACGACCTAATGGGGTCTCGCCATCTCTTATCTCTG	3524
Db	3128	tggcttlttgcatcttccctccacccccactctctttaaagtcatagtcgtgtcaaatgtgc	3187
QY	3525	TCCAGTTAACGGGGGCTGTTCCACTGTTTAACGCTCAGACTGCGCATGTGACAGAGACTCGAT	3584
Db	3188	tgaagcttggtgctcaagacttccaaagccactgtccggagtgtgcttgg9aacagagccaggt	3247
QY	3585	TCACCTCGGGGAGAGAGTAATACACATACATTTTAAGACTGTGTCTTGGAAGCACTGCGCA	3644
Db	3248	tccggtcttag9aagaatactgtagtaacttgaagatgtgtgtctg9aagctctcttacc	3307
QY	3645	GAATTAAAGAACAAAGCTCCCTCCCTGACACTGAGCCCGCAGAGGAGAGGATGACTTTGAGA	3704
Db	3308	acatgg9aagacaaagtgttcccaggggtgtgcacaaagcatgtgg9aaatcatacttccag	3367
QY	3705	ACGCAAGATGAGGTATCCGAGAAAACCTCCCTGTCTGTCTTAAAGAAATATCCTTTCACGA	3764
Db	3368	athtatcacatgaatactacag9aacacacacacccacgcgtgtcttcaacgtcatcaactigacca	3427
QY	3765	TCAAACCTTAAAGGAAAGATTGGCATTTGTTGGGGCGGCGACAGATCAGGGAAGTCTCGCTGG	3824
Db	3428	tccgcgcgcacgaagtgtg9ggcatctgttgg9aag9cgggtcttgg9aagtctctctgt	3487
QY	3825	GGATGGCCCTTCTCGCTGTGTGTGTGATTTATCTGAGAGCTGCAATCAAGATTTGTTGGGTGA	3884
Db	3488	gcatgtgtctcttccgcgctcgtgtgg9agcccatgtgcaggccggatctcattcgttcag9ggtg	3547
QY	3885	GAATCAGTGAATATTGGCCTTGGCCAGCTTCGAGCAAGCAAACTCTATATCTTCCCTCAAGAC	3944
Db	3548	acatttgcagcatcgccgtg9agagcttgcgttccaagtctccagtgatctccctcaagatc	3607
QY	3945	CGGTCTGTTCAGTGGGCACTGTCAATCAATAATTGGACCCCTTCAACACGATCACTGAAG	4004
Db	3608	cagtgctgtcttcag9aacacatcaatcaactgcatctcccttcaacgtcactgacc	3667

NAME/KEY: misc.feature
 LOCATION: (927)
 OTHER INFORMATION: n equals a,t,g, or c
 US-10-137-337-228

Query Match 12.2% Score 591.8; DB 7; Length 1579;
 Best Local Similarity 99.5%; Pred. No. 4.1e-104;
 Matches 604; Conservative 0; Mismatches 2; Indels 1; Gaps 1;

4213 ATTGATTCAGAGACATCCGAGAGCATTTGACACTGACATGTCACCATTCGCCA 4272
 1 attgattcaagaagaccatccgagaagcatttgacactgacatgctgacattgccc 60
 4273 TCCCTGCGACAGCGTTCTAGCTCCGATGAGATTATGCTGCTGACCCAGGACAGTGT 4332
 61 tcgctgcacacgctcttaagctcgaatgattatgctgctgagccagagagagtg 120
 4333 GGAGTTTGACACCCCATCGCTCTGTCGACGACAGAGTTCCGATTCATGCGATGT 4392
 121 ggaagcttgacacccatcgctctctgctcgaagacagcttcgattctatgcca 180
 4393 TCGTGTGCGAGAGACAGAGTCCGTCGACAGGCTGACTCTCCCTGTTGACAGAGTCTC 4452
 181 tgcctgcacagagacaaagctgcgtcgaagagctgactctccctgctgagagctc 240
 4453 TTTTCTTTAGAGCATTTGCCATTCCTGCTGCGGCGGCGCCCTTCATCGCTCTCTAC 4512
 241 ttctcttaagagatcgcatctccgctcgctgagcgagcccttcatcgctctctac 299
 4513 CGAAGCTTGCCTTTGCGATTTATCTTTGCGACAGACAGTTCGCGATTCGCTGTGTGT 4572
 300 cgaagcctgcctctccgattctatcttcgacagacagctccgagctgctgagct 359
 4573 TTCACCTTTAGGAGAGCTCATTTTGTATTTGATTTATTCATTTTCATGTAACAA 4632
 360 ttcaactttagagagagctcatttgaattatgattatctatctatctatctaaacaa 419
 4633 AATTAGTTTGTGTTTATTTGACCTCTTAAAGGTTCCAGGAACTTTATTAATGT 4692
 420 aaattatcttctgcttaattgactctaaagctcagagacgcttataatctgt 479
 4693 ATGAGAGCCTATTAATGACCTTTATACGTAGCTATTCATTTATTTCTGTCAT 4752
 480 atcagaagcctataaagaaacttatacagctatataataatctcgtacat 539
 4753 AGCCTATTTTACAGTGAAGATGTAAGCTTTTATTTATTTTAAATAAGCACTGTCT 4812
 540 agcctatttatacagtgaaatgtaagctgttattatataataaagcaactgtgct 599
 4813 AAAAAA 4819
 600 aataaca 606

RESULT 11
 PCT-US02-07787-35
 Sequence 35, Application PC/TUS0207787
 GENERAL INFORMATION:
 APPLICANT: The Brigham and Women's Hospital, Inc.
 APPLICANT: Yates, Karen
 APPLICANT: Mizuno, Shuichi
 APPLICANT: Glowacki, Julie
 TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF SKELETAL DEGENERATION CONDITIONS
 FILE REFERENCE: B0801/7244/KA/ERP
 CURRENT APPLICATION NUMBER: PCT/US02/07787
 CURRENT FILING DATE: 2002-03-12
 PRIOR APPLICATION NUMBER: US 60/274,980
 PRIOR FILING DATE: 2001-03-12
 NUMBER OF SEQ ID NOS: 79
 SOFTWARE: PatentIn version 3.0
 SEQ ID NO 35
 LENGTH: 5011

TYPE: DNA
 ORGANISM: Homo sapiens
 PCT-US02-07787-35

Query Match 10.5% Score 511.2; DB 1; Length 5011;
 Best Local Similarity 52.5%; Pred. No. 1.4e-88;
 Matches 1367; Conservative 0; Mismatches 1178; Indels 59; Gaps 9;

1811 CACATCCACCTGGGCGCACCTGCGCTTACAGAGACACTGACAGCATCGATCTGAGATC 1870
 2143 cacatcactctgggcca - ggaagcaccctcccaactgattgacatcccttcacatc 2200
 1871 CAAGAGGCTAACTGTTGGAATCTCGCGCAGTGTGGGAGTGGAAACCTCTTCATT 1930
 2201 ccgaagtgctctgtgctgctgctgctgctgctgctgctgctgctgctgctgct 2260
 1931 TCAGCCATTTTACGCCGATGACGCTTCTGAGAGGCGCATTTGCAATCACTGGAACCTTC 1990
 2261 tcagccctcttgctgctgctgctgctgctgctgctgctgctgctgctgctgctgct 2320
 1991 GCTTATGTGCGCCAGCAGGCTGATCTCAATGCTACTCTGAGAGCAACATCTGTTT 2050
 2321 gcttatgtgctgctgctgctgctgctgctgctgctgctgctgctgctgctgct 2380
 2051 GGGAGAGATATGATGAAGAAAGATACACTCTGCTGTAACAGCTCTGCTGAGGCTT 2110
 2381 ggaatgctgctgctgctgctgctgctgctgctgctgctgctgctgctgctgct 2440
 2111 GACCTGCGCATTTCTTCCACAGCAGCAGCTGAGAGAGTGGAGAGCGAGGCAACCTG 2170
 2441 gacctggaactctgctgctgctgctgctgctgctgctgctgctgctgctgctgct 2500
 2171 AGCGGTGCGAGCGCCAGAGATCAGCTTCCCGGCTTGTATGATGACAGAGCATC 2230
 2501 tctggtgctgctgctgctgctgctgctgctgctgctgctgctgctgctgct 2560
 2231 TACATCCTGAGCAGACCCCTGAGCTGCTTATGAGCCATGCGGCAACCATCTTCAT 2290
 2561 taccctctgctgctgctgctgctgctgctgctgctgctgctgctgctgctgct 2620
 2291 AGTGTCTAT-----CCGAAACATCTCAAGTCAAGACAGTCTGTTGTATCCACAG 2344
 2621 aatgtgattgctgctgctgctgctgctgctgctgctgctgctgctgctgctgct 2680
 2345 TTACAGTACCTGTTGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2404
 2681 atgactactgctgctgctgctgctgctgctgctgctgctgctgctgctgctgct 2740
 2405 AGAGGACCCATGAGAACCTGATGATGATGATGATGATGATGATGATGATGATGATGAT 2464
 2741 atggtctcttcaagagagctgctgctgctgctgctgctgctgctgctgctgctgct 2800
 2465 CTGTTCTGCGAGAGACAGCCAGCT---GAGATCAATTCATAAAGAAACAGCACTGT 2521
 2801 tatgctgctgctgctgctgctgctgctgctgctgctgctgctgctgctgctgct 2860
 2522 TCACAGAAGAGTCAAGCAAG-----GTCTTAAACAGATCAATAAAGAGG 2573
 2861 ccaaggaaggaaggaaggaaggaaggaaggaaggaaggaaggaaggaaggaaggaag 2920
 2574 AAAAAGCATTAAGCCAGAGAGGAGGAGCTTGTGACGCTG----- 2615
 2921 caacttgagagacagctcagctcctcctcctcctcctcctcctcctcctcctcctcct 2980
 2616 AAGAGAAAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 2675
 2981 aacagcagcagcagcagcagcagcagcagcagcagcagcagcagcagcagcagcagc 3040
 2676 GGGG-----CCCTTGCAATTCCTGTTATTAATGAGCCCTTTTCATGCTGAATGTAAGC 2728
 3041 gaggtgacaaagcgacagagcaggtcaggtcaggtcaggtcaggtcaggtcaggtcaggt 3100


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RESULT 13
US-09-930-213-287
: Sequence 287, Application US/09930213
: GENERAL INFORMATION:
: APPLICANT: ROSENTHAL, ANDRE
: APPLICANT: HINZMANN, BERND
: APPLICANT: SCHAEFER, REINHARD
: APPLICANT: ZUBER, JOHANNES
: APPLICANT: TCHÉ-NITSE, OLEG
: APPLICANT: GRIPS, MARTIN
: APPLICANT: HELLINEGEL, MARTIN
: APPLICANT: SCHMITZ, ANNE-CHANTAL
: APPLICANT: SERS, CHRISTINE
: TITLE OF INVENTION: DETECTION OF DIFFERENTIAL GENE EXPRESSIONS
: FILE REFERENCE: ALBRE-14
: CURRENT APPLICATION NUMBER: US/09/930,213
: CURRENT FILING DATE: 2001-01-31
: PRIOR APPLICATION NUMBER: DE 10004102.7
: PRIOR FILING DATE: 2000-01-31
: NUMBER OF SEQ ID NOS: 885
: SOFTWARE: PatentIn Ver. 2.1
: SEQ ID NO 287
: LENGTH: 4231
: TYPE: DNA
: ORGANISM: Homo sapiens
: US-09-930-213-287

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Db	1634	gtcataaagctctgtcctctgaaaaaggattacagctgttggagatgtgtatctgact	1693
OY	2144	GAGATTGGAGACGACGAGGCCAACCTTAGCGGTGGGACGACGACGATGTGCGCTTCC	2203
Db	1694	gtgatagaagatctggggaacaacgcgtgagtgaggggacgaagaacggttaaccttga	1753
OY	2204	CGGCGCTTGATTAAGTGAACAGAGCATACATCTGAGACGCCCTCGAGTCCCTTAGAT	2263
Db	1754	agagcagtgatcaagaatgtcatcatctactctcctgtacgactcctcctcagtgca	1813
OY	2264	GCCCATGTGGCAACCAACATCTTCATATAGTGCATATCGGAACATCTCAAGTCCAAACA	2323
Db	1814	gcggaagltagcaacacctgttctgaacctgtgatttttgcataatttgcatagagaatc	1873
OY	2324	GTTCTGTTTGTACCCACCACTTACATGATACCTGTTGATCTGTGAAGTAGTCTTTCATG	2383
Db	1874	acaatttagtactcaatctcgttgcagtaacctaaagctgcgaagtcagatctgatattg	1933
OY	2384	AAAGAGGCGTGTATTACGGAAGAAGCACCCCATGAGGAATGTAATTTAAATGTGTAC	2443
Db	1934	aaagttgtaaaatgtgcagaaagggaacttacaatgttctcctaaatctgtatagat	1993
OY	2444	TATGCTACCATTTTAAATTAACGCTGTGCTGGGAGAGACGCCGAGTTGATGATCAATTC	2503
Db	1994	tttgcctcccttctttaaagaagataatlgagaaagtgaacaacctccagttccagaact	2053
OY	2504	AAAAAGGAACACAGTGGTTCACAGAAAGATCAACAGACAAAGGCTCTTAAACAGATCA	2563
Db	2054	cccaactaaggaatcgttaccttccaagatcttgggttgcctccaacatctctaga	2113
OY	2564	ATTAAGAGGAAAAAGCATTAAGTAAAGCAGAGGAAGGCGACCTTGTGCTAGCTGGAAGAAA	2623
Db	2114	ccctccttgaagaagtgtgtctctggagagccaagatacagagaatgtccacgttaacta	2173
OY	2624	GGGAGAGGTTTCAAGTCCCTGTGTAGTATATGGTGTCTACATCCAGAGCTGTGGGGCCCC	2683
Db	2174	tcaagtagagaacccgttcttgaagaaagtgtgtttccaagcctctaaagaattactaga	2233
OY	2684	TTGCGATTCCGTTTATTTATGTGGCCCTTTTTCATGCTGAATGTGTGGAGACCGCTTAGC	2743
Db	2234	gtctgtgtcactcgtgattgtcttcatatttccatttctcctaacaacgcgcagctcaggtt	2293
OY	2744	ACGTGTGTGTGAGTTACTGTGATCAAGCAAGGAAGCGGGACACCACTGTGACTCGAAGG	2803
Db	2294	gacctatgtctcaagaattgtgtgtcttcatctactggaacaacaacaagaatgtcta	2353
OY	2804	AACGAGACGCTCGGTGATGACACATGAAAGGACATCCTCATATGTGACTACTATGCCAGC	2863
Db	2354	gtcacgtttaaattgtagaggaagaaatgtaaacgcgaagctagatcttaactgttactaga	2413
OY	2864	ATTCACGCCCTTCCATGAGGACGATCATGTGATCTCGAAGAACCATTCGAGAGTGTGCTTT	2923
Db	2414	atttattcaggtttaactgtgaagtacacgttcttlttggcatagcaagaatctctatgtga	2473
OY	2924	GTCAGGGGACGCTGCGAGCTTCTCCCGGCTCATGACGAGCTTTTCCGAAGAGTCCCT	2983
Db	2474	ttctaagctcctgttaactcttccaacacttgcacaacaanaaigtgttgatcaattctg	2533
OY	2994	CGAAGCCCTTGAAGTTTTTTGAACGACACCCTCACAGGAGGAGATTCTACAGGTTTTC	3043
Db	2534	aaagctccggtatattacttcttgaagaacaacaaatagaaagaattttaaatcgcttctc	2593
OY	3044	AAAGACATGTGATGAAGTTGACGCGGGCGGCTTCCAGGCCGAGATGTTATCCACAAC	3103
Db	2594	aaagacacttggaacttggatgtgttgcgcgcgtcgaacgttlttaagattatccagaca	2653
OY	3104	GTTATCCGTGTTCTTCTGTGTGGGAATGATCGAGAGAGTTCCTCCGCTTCTTGTG	3163
Db	2654	ttgtctaaagtgtgtgtgtgtctcctgtggtcgtgcgctgattcctctgtatcgcaata	2713
OY	3164	GCACTGGGGCCCTTGATCCTCTTTTTCAGTCTGACATTTGTCTCCAGGGTCTTGATT	3223
Db	2714	cccttgttccctcttgaaatcatatttcttcttcttgcgacataatttttggaaacgtca	2773


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OY 3224 CGGAGCTGAAGCGTCTGCACATATATCAGCGATGACCTTTCTCTCCACATCAGCGCC 3283
    || || || || || || || || || || || || || || || || || || || || || ||
Db 2774 agagatgtgaaagccgtggaatctacaactccgaggtccagtggttccactgtcatct 2833
OY 3284 AGCATACAGGCGCTTGCCACCATCCAGCGCTTACATTAAGGGGAGAGTTTCTGCACAGA 3343
    || || || || || || || || || || || || || || || || || || || || || ||
Db 2834 tctctcaggaggtctgagaccatccgcatacaagaagagaggtgtgcaggaactg 2893
OY 3344 TACCAGAGCTGCTGGAATGACACCAAGCTCTTTTGTGTTAGCTGTGCGCATGCGG 3403
    || || || || || || || || || || || || || || || || || || || || || ||
Db 2894 ttgatgtcaacacccaggtattacattcagaggcttgcttctgttcttgacaagctccgc 2953
OY 3404 TGGCTGCTGTCGGCTGAGACCTTCATGAGATCGCCCTCATCACCACACAGGGGCTGATG 3463
    || || || || || || || || || || || || || || || || || || || || || ||
Db 2954 tgggtgcgctcgcgtcgatgtcatctgtgcacatgttgcatacatcgtgtcccttggg 3013
OY 3464 ATCGTTCTATGCAAGGGGAGATTCCCCAGCCATGCGGGTCTGCGCATCTCTTATGCT 3523
    || || || || || || || || || || || || || || || || || || || || || ||
Db 3014 tccctgttcttgcaaaaaactctgatatgcgggaggttggtttggcactgtcctatggc 3073
OY 3524 GTCCAGTTAAGGGGCGTGTTCACGTTTACGCTCAGACTGCGATGTGAGACAGAACTCGA 3583
    || || || || || || || || || || || || || || || || || || || || || ||
Db 3074 ctcaagctcatggggatggtcagtggtgtgtcgcacaaagtgtgaagtgtgaatatg 3133
OY 3584 TTCACTCGGAGAGGAGATCAATCACTACTTAAAGACTGTCTGCTGGAAGGACCTGACC 3643
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Db 3134 atgattccagtaagaaggctcatgtgaatcacagacct-----gaaaagaagacct 3187
OY 3644 AGAATTAAAGAACAGGCTCCCTCCCTGACTGCGCCAGAGAGGAGAGTGACTTTGAG 3703
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Db 3188 tgggaataatcagaagaagcccaacccagccgctccatgaagagatataatcttggac 3247
OY 3704 AACGCAAGATGAGCTACCGAAGAAACCTCTGCTCTTAAGAAAGTATCTTCAAGC 3763
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Db 3248 aatgtgaactcatgtacagctccagtggtggtcctgtgtactgaagcatctgacagcactc 3307
OY 3764 ATCAAACTTAAAGAGGAGATTGTTGGGGGAGACAGGGAATCCTCGCTG 3823
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Db 3308 attaaatacaaaaagaaggttgcatgttggaagaacccgagcttgaaaaagttccctc 3367
OY 3824 GGGATGCGCCCTTCCCTGCTGAGTATCTGAGCGCTCATCAACAGATTGATGAGATG 3883
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Db 3368 atccagaccttlttaattgattgcaga---accgaaagttaaatlttgattgaagaatc 3424
OY 3884 AGAATCAATGATATTTGGCTTGGCCGACTCCGAAACAACTCTATCATTTCTCAAGAG 3943
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Db 3425 ttgacaactgaaattgtaacttcaagatttaagaagaanaatgtcaatcatcaccagaa 3484
OY 3944 CCGGTGCTGTTCACTGCGACCTGTAGATCAAAATTTGGACCCCTTCAACAGTACACTGAA 4003
    || || || || || || || || || || || || || || || || || || || || || ||
Db 3485 cctgttlttgctacttggaacaatlgaaaaaacctgtaaccttlaaggaacaaacgatt 3544
OY 4004 GACGAGATTGGAGTCCCTGAGAGACACACATGGAAGAAATGATTGCTCAGCTACCT 4063
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Db 3545 gaggaactgtggaatgtccttaacaagaagtacaacttaagaagaaccttgaaatccttcc 3604
OY 4064 CTGAACCTTGAAATCTGAGTGAGTGAATGCGGATTAATCTTCACTGCGGAAACGCGAG 4123
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Db 3605 ggtlaaaatgtaactgaatttagcagaatcagaatccaaattttagtgttgcaagaagaa 3664
OY 4124 CTCTTGTGCAATAGCTAGAGCCCTGCTCCGACACTGAAGATTGATGATTGATGAAGCC 4183
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OY 4184 ACAGCTCCATGAGACAGAGACAGACTTATGATTCAAGAGACATCCGAGAGCATTT 4243
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Db 3725 accgcaaatgtggaatccaaagaactgatgtatatacaaaaaaaadtcocgggaagaattt 3784
OY 4244 GCAGACTGTACATCTGACCATTTGCCCATGCTGCACACAGGTTTCTAGGCTCCGATAGG 4303
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Db 3785 gccacactgacacgtgtcaaacatctgcacacagattgaacacccattatgtacagagaca 3844
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OY 4304 ATTAGTGCTGCGCCAGGAGACAGATGCTGAGTTTGACACCCCATCGCTCTTCTGCC 4363
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Db 3845 ataagtgtttagattcagaagaactgaaataatagtgcaggtatgttctgtgcaaa 3904
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Db 3905 aataagagagcattatttacaagaatggt 3933

RESULT 14
US-09-647-140A-1
; Sequence 1, Application US/09647140A
; GENERAL INFORMATION:
; APPLICANT: Fox Chase Cancer Center
; APPLICANT: Krush, Gary D.
; APPLICANT: Lee, Kun
; APPLICANT: Belinsky, Martin G.
; APPLICANT: Bain, Lisa J.
; TITLE OF INVENTION: MRP-Related ABC Transporter Encoding
; TITLE OF INVENTION: Nucleic Acids and Methods of Use Thereof
; FILE REFERENCE: PCCC 98-02
; CURRENT APPLICATION NUMBER: US/09/647,140A
; CURRENT FILING DATE: 2001-05-21
; PRIOR APPLICATION NUMBER: PCT/US99/06644
; PRIOR FILING DATE: 1999-03-26
; PRIOR APPLICATION NUMBER: 60/079,759
; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: 60/095,153
; PRIOR FILING DATE: 1998-08-03
; NUMBER OF SEQ ID NOS: 18
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 1
; LENGTH: 4231
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-647-140A-1

Query Match 9.08; Score 437.4; DB 5; Length 4231;
Best Local Similarity 48.88; Pred. No. 2e-74;
Matches 1244; Conservative 0; Mismatches 1296; Indels 9; Gaps 2;

OY 1844 ACATCGACACATCGATCTGAGATCCAAAGGGTAACGTGTAATCGTGGCGGAGT 1903
    || || || || || || || || || || || || || || || || || || || || || ||
Db 1394 actctacaaggcccttcccttaactgtcagacctggcggaattgttagctgtgcggccc 1453
OY 1904 GTGGGAAGTGGAAAAACCTCTCTCATTTTCAGCAATTTTAGCGCCAGATGACCTTTAGAG 1963
    || || || || || || || || || || || || || || || || || || || || || ||
Db 1454 gtggagagaggaaggtacatcactgtlaagtgccgtgtccgggaattggccccaagtac 1513
OY 1964 GGCAGCATTCGAATCAGTGAACCTTGCTTATGTGCGCCAGAGGCGCTGCATCTCAAT 2023
    || || || || || || || || || || || || || || || || || || || || || ||
Db 1514 gggctgtcagcgtgtcagtggaagaatttccatgtgtctcagcagccctgggtgtctcg 1573
OY 2024 GCTACTCTGAGAGAACAACTCTGTTGGGAGGAATGATGAAAGAAATPACAACTCT 2083
    || || || || || || || || || || || || || || || || || || || || || ||
Db 1574 ggaacctcgaaggaatlaatttattcttggaagaataatgaaagaacagatagaaaaa 1633
OY 2084 GTGCTGAACACCTGCTGCTGAGGCTTGACCTGGCCATTTCTCCAGCAGGACCTGACG 2143
    || || || || || || || || || || || || || || || || || || || || || ||
Db 1634 gtctaaagagctgtgtccttgtaaaaaagatttaacagctgttgaggatgtgatctgact 1693
OY 2144 GAGATTGAGAGCGAGCAGCAACCTGAGCGGTGGGCGAGCCGACAGAGATCAGCTTCCC 2203
    || || || || || || || || || || || || || || || || || || || || || ||
Db 1694 gtgatagagaatcggggacaacacctgagtgagggcgagaagaacagggtaaaccttgca 1753
OY 2204 CGGGCTTGTATGATGAGAGAGGACATCTACATTCCTGCGAGCCGCCCTGAGTGCCTTACAT 2263
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Db 1754 agagcagtgatatacaagatgctgcatactatctcttgagagctatctctcagtgcaatgat 1813
OY 2264 GCCCATGTGGCAACACATCTTCAATAGTCTATCCGGAACAATCTCAAGTCCAAAGACA 2323
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Db 1814 gcgggaagttagcagacacttgctgaactgttatgttgcataatttgcagtgaagaagctc 1873
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APPLICANT: Drmanac, Radoje T.
APPLICANT: Labat, Ivan
APPLICANT: Strache-Crain, Birgit
APPLICANT: Dickson, Mark C.
APPLICANT: Jones, Lee W.
TITLE OF INVENTION: Novel Nucleic Acid Sequences Obtained
FILE REFERENCE: 780CIP
CURRENT APPLICATION NUMBER: US/10/011,154
PRIOR FILING DATE: 2001-12-06
PRIOR APPLICATION NUMBER: US/09/524,038
PRIOR FILING DATE: EARLIER FILING DATE: 2000-03-13
PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 09/404,284
PRIOR FILING DATE: EARLIER FILING DATE: 1999-09-21
NUMBER OF SEQ ID NOS: 4670
SOFTWARE: HY-Patent.pl Version 3.1
SEQ ID NO 3846
LENGTH: 426
TYPE: DNA
ORGANISM: Homo sapiens
US-10-011-154-3846

Query Match 8.5%; Score 409.8; DB 7; Length 426;
Best Local Similarity 99.5%; Pred. No. 2.9e-69;
Matches 411; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 4073 GAATCTGAGTATGAGATGGGATTAATCTTCAGTGGGAGACGGACGCTTGTGC 4132
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Db 14 gaggctgaagtgatggagaaaggagatacttcacagtgaggagcagctcttggc 73
QY 4133 ATAGCTAGAGCCCTGCGCCGCACTGTAAGTTGATTTAGATGAAGCCACAGCTGCC 4192
|||
Db 74 atagctagaagccctgcccactgtaagattctgatttagatgaagccacagctgcc 133
QY 4193 ATGACACAGAGACAGACTTATGATTCAGAGACCATCCGAGAGCAATTTGCAGACTGT 4252
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Db 134 atgacacagagagacagactattgattcaagagacatccgagagcatttcagactgt 193
QY 4253 ACCATGCTGACATTCGCCATCGCCTGCACACAGGTTTACGCTCCGATAGGATTTAGTGTG 4312
|||
Db 194 accatgctgacatcccatcgctgacacaggttctcagctccgattagattatgtg 253
QY 4313 CTGGCCAGGAGACAGTGATGATTCAGACCCCATCGTCTCTGTCACAGACAGT 4372
|||
Db 254 ctggccagagagacagtgagtgagtgacaccccatcgctctctgctccaagacagt 313
QY 4373 TCCGATTTATGACATGTTTGTGCTGCAGAGAAACAAGTCCGCTCAAGGCTGACTC 4432
|||
Db 314 tccgattctatgcatgctgttcgctgcagagacaagtgctgtcacaaggtgactc 373
QY 4433 CTCCTGTTGACGAGTCTCTTTCTTTTACAGCATTCGCAATTCCTGCTGGG 4485
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Db 374 ctccctgtgacagagctcttcttcttagagacatgcattccctgctgtgg 426

Search completed: August 11, 2002, 11:11:20
Job time: 6765 sec

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GenCore version 4.5
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OM protein - protein search, using sw model

Run on: August 11, 2002, 09:20:05 ; Search time 25.86 Seconds
(without alignments)
1357.292 Million cell updates/sec

Title: US-09-528-031-2

Perfect score: 7308

Sequence: 1 MKDIDGKEYITPSGYRSV.....DSRNFAMFAENKVAVKG 1437

Scoring table: BIOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 231628 seqs, 24425594 residues

Total number of hits satisfying chosen parameters: 231628

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Database : Issued Patents-AA:*

1: /cgn2_6/ptodata/2/1aa/5A.COMB.pep:*
2: /cgn2_6/ptodata/2/1aa/5B.COMB.pep:*
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4: /cgn2_6/ptodata/2/1aa/6B.COMB.pep:*
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6: /cgn2_6/ptodata/2/1aa/Backfile1.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	7308	100.0	1437	3	US-09-061-400-2
2	7298	99.9	1453	2	US-09-001-273-2
3	7298	99.9	1453	4	US-08-843-459A-2
4	2082	28.5	1531	1	US-08-463-092B-4
5	2082	28.5	1531	2	US-08-462-109A-4
6	2082	28.5	1531	2	US-08-460-907B-4
7	2082	28.5	1531	3	US-08-463-179A-4
8	2082	28.5	1531	3	US-08-461-384B-4
9	2075	28.4	1531	1	US-08-141-893-2
10	2075	28.4	1531	1	US-08-463-092B-2
11	2075	28.4	1531	2	US-08-462-109A-2
12	2075	28.4	1531	2	US-08-460-907B-2
13	2075	28.4	1531	3	US-08-463-179A-2
14	2075	28.4	1531	3	US-08-461-384B-2
15	2075	28.4	1531	3	US-08-407-207A-2
16	2055.5	28.1	1528	1	US-08-463-092B-6
17	2055.5	28.1	1528	2	US-08-462-109A-6
18	2055.5	28.1	1528	2	US-08-460-907B-6
19	2055.5	28.1	1528	3	US-08-463-179A-6
20	2055.5	28.1	1528	3	US-08-461-384B-6
21	2013.5	27.6	1622	4	US-08-972-927-6
22	2006	27.4	1261	4	US-09-439-313-538
23	1991	27.2	1621	4	US-08-972-927-3
24	1894.5	25.9	1328	4	US-09-439-313-537
25	1759	24.1	1581	4	US-08-726-320-3
26	1759	24.1	1581	4	US-09-208-716-3
27	1757.5	24.0	1580	4	US-08-726-320-1

28	1757.5	24.0	1580	4	US-09-208-716-1	Sequence 1, App11
29	1732	23.7	1581	4	US-08-726-320-4	Sequence 4, App11
30	1732	23.7	1581	4	US-09-208-716-4	Sequence 4, App11
31	1730	23.7	1477	3	US-08-492-459-10	Sequence 10, App1
32	1730	23.7	1477	3	US-08-423-752-10	Sequence 10, App1
33	1730	23.7	1477	3	US-08-945-994-3	Sequence 3, App11
34	1730	23.7	1477	3	US-08-716-873-24	Sequence 24, App1
35	1730	23.7	1477	4	US-09-368-431-24	Sequence 24, App1
36	1730	23.7	1477	4	US-09-414-006-10	Sequence 10, App1
37	1669.5	22.8	1581	2	US-08-404-531B-6	Sequence 6, App11
38	1669.5	22.8	1581	3	US-08-476-900A-6	Sequence 6, App11
39	1669.5	22.8	1581	3	US-08-488-546A-6	Sequence 6, App11
40	1669.5	22.8	1582	2	US-08-404-531B-9	Sequence 9, App11
41	1669.5	22.8	1582	3	US-08-476-900A-9	Sequence 9, App11
42	1669.5	22.8	1582	3	US-08-488-546A-9	Sequence 9, App11
43	1669.5	22.8	1582	4	US-08-726-320-5	Sequence 5, App11
44	1669.5	22.8	1582	4	US-09-208-716-5	Sequence 5, App11
45	1528.5	20.9	1498	2	US-08-404-531B-28	Sequence 28, App1

ALIGNMENTS

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RESULT 1
US-09-061-400-2
; Sequence 2, Application US/09061400
; Patent No. 6077936
; GENERAL INFORMATION:
; APPLICANT: SHYUAN, Andrew
; TITLE OF INVENTION: NOVEL MULTIDRUG RESISTANCE-ASSOCIATED
; NUMBER OF INVENTIONS: POLYPEPTIDE
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSER: LAHIVE & COCKFIELD, LLP
; STREET: 28 State Street
; CITY: Boston
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/061,400
; FILING DATE: 16-APRIL-1998
; CLASSIFICATION: 536
; ATTORNEY/AGENT INFORMATION:
; NAME: Elizabeth A. Hanley
; REGISTRATION NUMBER: 33,505
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 227-7400
; TELEFAX: (617) 742-4214
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1437 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-09-061-400-2

Query Match 100.0%; Score 7308; DB 3; Length 1437;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1437; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MKDIDGKEYITPSGYRSVREPTSGTHRDSDSKFRTRPLECODEALETARAGGS 60
DB 1 MKDIDGKEYITPSGYRSVREPTSGTHRDSDSKFRTRPLECODEALETARAGGS 60
QY 61 LDASMSQLRLDEHPKRGKYGHLGSLAKRPIRTTCKHQHPVDNAGLFSCWTFSLSLAR 120
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Db 61 LDASHMSQRLIDDEHPKGYHHGLSALKPRTCTCKHQHPVDNAGLFCSCWTFWSLSLAR 120
QY 121 VAHKKGELSMEDVWSLSKSHSSDVNCRRLERLMOEELNEVGPPAAALRRVWTFCTRLL 180
Db 121 VAHKKELSMEDVWSLSKSHSSDVNCRRLERLMOEELNEVGPPAAALRRVWTFCTRLL 180
QY 181 LSVICMLTQLAGFSGPAPFWKHLEYYTOATESNLQYSLLVGLGLLTELIVRSWLSALTW 240
Db 181 LSVICMLTQLAGFSGPAPFWKHLEYYTOATESNLQYSLLVGLGLLTELIVRSWLSALTW 240
QY 241 ALNRYGVRLRGAILLTMARKKILTKLNKEKSLGELINCSNDGOMFPAAGVSLAG 300
Db 241 ALNRYGVRLRGAILLTMARKKILTKLNKEKSLGELINCSNDGOMFPAAGVSLAG 300
QY 301 PVVALIGMIYNYIILGPTFLGSAVFILFYPAMMFASRLTAFRRCKVATDERQKME 360
Db 301 PVVALIGMIYNYIILGPTFLGSAVFILFYPAMMFASRLTAFRRCKVATDERQKME 360
QY 361 VLYYIKFKIMYAMVAFSOSVOKIREERRILEKAGYFOSITGVGAPYIVVIVASVYTFSV 420
Db 361 VLYYIKFKIMYAMVAFSOSVOKIREERRILEKAGYFOSITGVGAPYIVVIVASVYTFSV 420
QY 421 HHTLGFDLTAQAFTVYVFNSTALKYTPSVKSLSEASVAVDRFKSLFMEEVHMK 480
Db 421 HHTLGFDLTAQAFTVYVFNSTALKYTPSVKSLSEASVAVDRFKSLFMEEVHMK 480
QY 481 NKPSAPHIKIEKNATLWDSHSSIONSPKLTPMKKDKRASRCKKEVROLOTEHOA 540
Db 481 NKPSAPHIKIEKNATLWDSHSSIONSPKLTPMKKDKRASRCKKEVROLOTEHOA 540
QY 541 VLAEOGHLLDSDERPSEEEBKHILGHRLORTLHSDLELOEGKLVGICGSVSG 600
Db 541 VLAEOGHLLDSDERPSEEEBKHILGHRLORTLHSDLELOEGKLVGICGSVSG 600
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Db 601 KTSLSALILGQWTLLEGSIAISGTAIYVAAQAMILNATLRDNIIFGKEYDEERYNSVLNS 660
QY 661 CCLRPDLALPSSDLTEIGEGANLSSGROKISLARALYSDRSIYILDDPSALDAHV 720
Db 661 CCLRPDLALPSSDLTEIGEGANLSSGROKISLARALYSDRSIYILDDPSALDAHV 720
QY 721 NHIFNSAIRKHLKSTVLTVTHOLOYLVDCEVLFMEKGCITERTHELMNLNDYATI 780
Db 721 NHIFNSAIRKHLKSTVLTVTHOLOYLVDCEVLFMEKGCITERTHELMNLNDYATI 780
QY 781 FNNLLIGTPEVEINSKKETSGSOKSODKPKTGSIKKEKAVKPEEQOLVLEEKGGGS 840
Db 781 FNNLLIGTPEVEINSKKETSGSOKSODKPKTGSIKKEKAVKPEEQOLVLEEKGGGS 840
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Db 841 VPMASYGVYIOAAGGPIALFLVIALFMLNMGSTAFSTWMLSYWIKOGSGNTTVRGNTS 900
QY 901 VSDSMKDNPHMQYYASIALSMAMVLLIKAIRGVVFGTLRASSRLHDELFRILLSPM 960
Db 901 VSDSMKDNPHMQYYASIALSMAMVLLIKAIRGVVFGTLRASSRLHDELFRILLSPM 960
QY 961 KFPFTTPTGRILNFSKDMDEVVRLPPOAMFTQNVILVFCVGMIAGVPMFLVAVGP 1020
Db 961 KFPFTTPTGRILNFSKDMDEVVRLPPOAMFTQNVILVFCVGMIAGVPMFLVAVGP 1020
QY 1021 LVILFSLVIAYSRVLIRKLRLDNIOSPLSHITSSIOGATIHAVNKGEFLHARQEL 1080
Db 1021 LVILFSLVIAYSRVLIRKLRLDNIOSPLSHITSSIOGATIHAVNKGEFLHARQEL 1080
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Db 1081 LDNNQAPFPLETCAMRLAVRLDLISALITTTGIMIVLMHGQIPPAVAGLAISYAVOLT 1140
QY 1141 GLFOFTVRLASETBARTSVERRINHYIKTSLERAPARKKAPSPDMPQEGEYTFENAM 1200

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Db 1141 GLFOFTVRLASETBARTSVERRINHYIKTSLERAPARKKAPSPDMPQEGEYTFENAM 1200
QY 1201 RYRENPLVLKRYSTFIKKREKIGIVRGSGSSIGMALFRLVELSGCCIKIDGVRISD 1260
Db 1201 RYRENPLVLKRYSTFIKKREKIGIVRGSGSSIGMALFRLVELSGCCIKIDGVRISD 1260
QY 1261 IGLADRSKLSIIPQEPVLFSGTVRSNLDPENOYTEDOIMDLERTHMECTAOLPLKLE 1320
Db 1261 IGLADRSKLSIIPQEPVLFSGTVRSNLDPENOYTEDOIMDLERTHMECTAOLPLKLE 1320
QY 1321 SEVMENGDNFSYGEROLLCIARALLHCKLILLDEATAAMDTEDDLIOETIREAFADCT 1380
Db 1321 SEVMENGDNFSYGEROLLCIARALLHCKLILLDEATAAMDTEDDLIOETIREAFADCT 1380
QY 1381 MUIAHRLTIVGSDRIWLAOGVVEFPTPSVLLSNDSSRFYAMFAAENKVAVK 1437
Db 1381 MUIAHRLTIVGSDRIWLAOGVVEFPTPSVLLSNDSSRFYAMFAAENKVAVK 1437

RESULT 2
US-09-001-273-2
; Sequence 2, Application US/09001273
; Patent No. 5994130
; GENERAL INFORMATION:
; APPLICANT: SHYIAN, Andrew
; TITLE OF INVENTION: NOVEL MULTIDRUG RESISTANCE-ASSOCIATED
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESS: Testa, Hurwitz & Thibault
; STREET: 125 High St.
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02110
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentln Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/001,273
; FILING DATE:
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: FENTON, Gillian M
; REGISTRATION NUMBER: 36,508
; REFERENCE/DOCKET NUMBER: MTL-001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 248-7000
; TELEFAX: (617) 248-7100
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1453 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-09-001-273-2

Query Match 99.9%; Score 7298; DB 2; Length 1453;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 1436; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1 MKDIDIGKEYIIPSPGYRVERERTSGTHRDREDSKFRRTPLDECODALETAARAGLS 60
Db 17 MKDIDIGKEYIIPSPGYRVERERTSGTHRDREDSKFRRTPLDECODALETAARAGLS 76
QY 61 LDASHMSQRLIDDEHPKGYHHGLSALKPRTCTCKHQHPVDNAGLFCSCWTFWSLSLAR 120
Db 77 LDASHMSQRLIDDEHPKGYHHGLSALKPRTCTCKHQHPVDNAGLFCSCWTFWSLSLAR 136
QY 121 VAHKKGELSMEDVWSLSKSHSSDVNCRRLERLMOEELNEVGPPAAALRRVWTFCTRLL 180

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Db 137 VAAKKGELSMEDVWSLSKHESSDVNCRRLERLMOEELNEVGPDPAASLRVWVIFCRTL 136
Qy 181 LSTVCLMTITQLAGFSGPAFAVVKHLEVTQATESNLQYSLLVGLLTELIVRSMSLALTW 240
Db 197 LSTVCLMTITQLAGFSGPAFAVVKHLEVTQATESNLQYSLLVGLLTELIVRSMSLALTW 256
Qy 241 ALMYRIVGLRGAULTMAFKILTKNIKESJGELINCSNGQRMFEAAAGSLAG 300
Db 257 ALMYRIVGLRGAULTMAFKILTKNIKESJGELINCSNGQRMFEAAAGSLAG 316
Qy 301 PVVAIIGMTIYNVITLPTGELSAVEILFYPAMMFASRLTAYFRRCVATDERVOKME 360
Db 317 PVVAIIGMTIYNVITLPTGELSAVEILFYPAMMFASRLTAYFRRCVATDERVOKME 376
Qy 361 VLTIFYIKMYANVAKAFSOSVOKIREBERRILEKAGYPOSITVGVAVIVVASVTFESV 420
Db 377 VLTIFYIKMYANVAKAFSOSVOKIREBERRILEKAGYPOSITVGVAVIVVASVTFESV 436
Qy 421 HMTLGFDLTPAQAFTVTVTENSMTFALKVTPESVKSLSSEASVAVDRKSLFMEEVMIK 480
Db 437 HMTLGFDLTPAQAFTVTVTENSMTFALKVTPESVKSLSSEASVAVDRKSLFMEEVMIK 496
Qy 481 NKBPASHIKIEMKNATLANDSSHSSIONSPLTPKMKKDKRASRGKKEKVRQLOREHQA 540
Db 497 NKBPASHIKIEMKNATLANDSSHSSIONSPLTPKMKKDKRASRGKKEKVRQLOREHQA 556
Qy 541 VLAEOGHLLDSDERPSPREEEGKHIIHGLRLQRTLSHIDLEIOBKLVIGCSVSG 600
Db 557 VLAEOGHLLDSDERPSPREEEGKHIIHGLRLQRTLSHIDLEIOBKLVIGCSVSG 616
Qy 601 KTSLSAIIIGOMTLLGSGTASISGTPAVVAQAAMILNATLTBNLTFCKEYDEERYNSVLS 660
Db 617 KTSLSAIIIGOMTLLGSGTASISGTPAVVAQAAMILNATLTBNLTFCKEYDEERYNSVLS 676
Qy 661 CCLRPLDAILPSSDLTEIGERGANLGGORRISLARALYSDRSIYLLDPLSALDAHV 720
Db 677 CCLRPLDAILPSSDLTEIGERGANLGGORRISLARALYSDRSIYLLDPLSALDAHV 736
Qy 721 NHIFNSAIRKHLKSKTVLFTYHOLQYLVDCDEYIFMKEGCTITERGHEELMNGDYAT 780
Db 737 NHIFNSAIRKHLKSKTVLFTYHOLQYLVDCDEYIFMKEGCTITERGHEELMNGDYAT 796
Qy 781 FNNLLGEPPEVINSKKEYSOGSKSODKPGTGSIKKEKAVPPEGOLVLEEKGGS 840
Db 797 FNNLLGEPPEVINSKKEYSOGSKSODKPGTGSIKKEKAVPPEGOLVLEEKGGS 856
Qy 841 VPMSVYGVYIOAAGPLAFLVIALFMLANGSTAFSTMWLSYIKOGSGNTVTYRGNETS 900
Db 857 VPMSVYGVYIOAAGPLAFLVIALFMLANGSTAFSTMWLSYIKOGSGNTVTYRGNETS 916
Qy 901 VSDSMKDNPMOYIASIVALSMAVMLLKAIRGVVFEVKGTLRASSRLHDELFRRIILSPM 960
Db 917 VSDSMKDNPMOYIASIVALSMAVMLLKAIRGVVFEVKGTLRASSRLHDELFRRIILSPM 976
Qy 961 KPEFDTPTGRLILRFSGKMDDEVVRLPEQAEMLIOWIIVFCVGMAGVFPMEIVAVGP 1020
Db 977 KPEFDTPTGRLILRFSGKMDDEVVRLPEQAEMLIOWIIVFCVGMAGVFPMEIVAVGP 1036
Qy 1021 LVTLFVLAHVSVRLIRELKRNDINOSPLSHITSSIOGLATIHANKOEFJHRQEL 1080
Db 1037 LVTLFVLAHVSVRLIRELKRNDINOSPLSHITSSIOGLATIHANKOEFJHRQEL 1096
Qy 1081 LDDNOAPFLFTCAMRMLAVRDLISALITTTGLMIVLMHGOI PRAYAGLAISYAVOLT 1140
Db 1097 LDDNOAPFLFTCAMRMLAVRDLISALITTTGLMIVLMHGOI PRAYAGLAISYAVOLT 1156
Qy 1141 GLFOFYRLASETEARFTSVERNHYIKTSLAPARINKKAPSPDMPQGEVTFENAEK 1200
Db 1157 GLFOFYRLASETEARFTSVERNHYIKTSLAPARINKKAPSPDMPQGEVTFENAEK 1216
Qy 1201 RYREBNPLVLKVSFTIKPEKIGIVGRTSGSSLSGMAJFRLVELSGGCIKIDGVNISD 1260

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Db 1217 RYREBNPLVLKVSFTIKPEKIGIVGRTSGSSLSGMAJFRLVELSGGCIKIDGVNISD 1276
Qy 1261 IGLADLRKSLIIPQEVLFSGTVRSNLDPPNOYTEQIWDALERTHMEKCIQOLPKLE 1320
Db 1277 IGLADLRKSLIIPQEVLFSGTVRSNLDPPNOYTEQIWDALERTHMEKCIQOLPKLE 1336
Qy 1321 SEYMENDNFSVGEROLLCTARALLRCKLILIDEAFAANDTEDDLIOETIEAPADCT 1380
Db 1337 SEYMENDNFSVGEROLLCTARALLRCKLILIDEAFAANDTEDDLIOETIEAPADCT 1396
Qy 1381 MULTIAHRLHTVLSGDRIMVLAQGVVEFDPVSVLSSNDSSRFYAMFAAENKVAVKG 1437
Db 1397 MULTIAHRLHTVLSGDRIMVLAQGVVEFDPVSVLSSNDSSRFYAMFAAENKVAVKG 1453

RESULT 3
US-08-843-459A-2
; Sequence 2, Application US/08843459A
; Patent No. 6162616
; GENERAL INFORMATION:
; APPLICANT: SHIJIAN, Andrew
; TITLE OF INVENTION: NOVEL MULTIDRUG RESISTANCE-ASSOCIATED
; TITLE OF INVENTION: POLYPEPTIDE
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: LAHIVE & COCKFIELD, LLP
; STREET: 28 State Street
; CITY: Boston
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/843,459A
; FILING DATE: 16-Apr-1997
; CLASSIFICATION: 536
; ATTORNEY/AGENT INFORMATION:
; NAME: Hanley, Elizabeth A.
; REGISTRATION NUMBER: 33,505
; REFERENCE/DOCKET NUMBER: MNI-056 (formerly MIL-001)
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617)742-4214
; TELEFAX: (617)227-7400
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1453 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-843-459A-2

Query Match 99.9%; Score 7298; DB 4; Length 1453;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 1436; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 1 MKDIDGKEYIIPSGVRSYRERTSGTHRDREDSFRRTTRPLECODALETARAGLS 60
Db 17 MKDIDGKEYIIPSGVRSYRERTSGTHRDREDSFRRTTRPLECODALETARAGLS 76
Qy 61 LDASMSQULRIIDDEHFKGKYYHGLSALKPIRTTCQHHPVDNAGLFSCTFMSLSLAR 120
Db 77 LDASMSQULRIIDDEHFKGKYYHGLSALKPIRTTSKHQHPVDNAGLFSCTFMSLSLAR 136
Qy 121 VAAKKGELSMEDVWSLSKHESSDVNCRRLERLMOEELNEVGPDPAASLRVWVIFCRTL 180
Db 137 VAAKKGELSMEDVWSLSKHESSDVNCRRLERLMOEELNEVGPDPAASLRVWVIFCRTL 196
Qy 181 LSTVCLMTITQLAGFSGPAFAVVKHLEVTQATESNLQYSLLVGLLTELIVRSMSLALTW 240

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Db 197 LSTVCLMTQLAGFSGPAPVAKHLLLEYTOATSNLOYSLLVLGLLLEIVTWSMALTW 256
Qy 241 ALNFTGYRLGALLTMAFKILKLNKESLIGELINICSDGOMPEAAVGSLLAG 300
Db 257 ALNFTGYRLGALLTMAFKILKLNKESLIGELINICSDGOMPEAAVGSLLAG 316
Qy 301 PVVALGMIYNYIILGPGFGLSANVILFYPAMFASRLTAFKRCVANDERVOKNE 360
Db 317 PVVALGMIYNYIILGPGFGLSANVILFYPAMFASRLTAFKRCVANDERVOKNE 376
Qy 361 VLYYIKFKMAYAKVAFSGSVOKIREEBRIIEKAGYFOSITVGAPIVYVAVTSV 420
Db 377 VLYYIKFKMAYAKVAFSGSVOKIREEBRIIEKAGYFOSITVGAPIVYVAVTSV 436
Qy 421 HMTLGFEDLTAQAFTVTVFVNSMTFALVTPSVKSLSEASVAVDRFSLFMEEVHMK 480
Db 437 HMTLGFEDLTAQAFTVTVFVNSMTFALVTPSVKSLSEASVAVDRFSLFMEEVHMK 496
Qy 481 NKPSAPHIKIEKNATLAWDSHSSIONSPLTPKMKDKRASKKKEKVKROLQTEHOA 540
Db 497 NKPSAPHIKIEKNATLAWDSHSSIONSPLTPKMKDKRASKKKEKVKROLQTEHOA 556
Qy 541 VLAEGKHLLDSDERPSEEBEKGHILGHLRLORTLHSDLEIOEGKLVGICGSVSG 600
Db 557 VLAEGKHLLDSDERPSEEBEKGHILGHLRLORTLHSDLEIOEGKLVGICGSVSG 616
Qy 601 KTSLSIALGOMTLEGGISAIISGFYAVAAQAMILNATLRNILEGKEYDEERYNSVLNS 660
Db 617 KTSLSIALGOMTLEGGISAIISGFYAVAAQAMILNATLRNILEGKEYDEERYNSVLNS 676
Qy 661 CCLRPDLALPSSDLTETIGEGANLNGGORISLARALYSRSTYIILDDPLSALDAVAG 720
Db 677 CCLRPDLALPSSDLTETIGEGANLNGGORISLARALYSRSTYIILDDPLSALDAVAG 736
Qy 721 NHIFNSAIRKHLKSKTVLFTVHOYLVDCEVIFPKKGCITERTGHELMNLNDYATI 780
Db 737 NHIFNSAIRKHLKSKTVLFTVHOYLVDCEVIFPKKGCITERTGHELMNLNDYATI 796
Qy 781 FNNLLIGTPEVEINSKETSGSOKSODKPKTGSIKKEKAVKPEESQOLVLEEKGGGS 840
Db 797 FNNLLIGTPEVEINSKETSGSOKSODKPKTGSIKKEKAVKPEESQOLVLEEKGGGS 856
Qy 841 VPMSYGVYIOAGGPIPLFVIMLFMLNVTAFSTWMLSWIKOGSGNTVFRNGTSS 900
Db 857 VPMSYGVYIOAGGPIPLFVIMLFMLNVTAFSTWMLSWIKOGSGNTVFRNGTSS 916
Qy 901 VSDSKNDPHNOYASIVALSMAVWLILKALRGVYFVKGTLRASSRLHDELFRILRSPM 960
Db 917 VSDSKNDPHNOYASIVALSMAVWLILKALRGVYFVKGTLRASSRLHDELFRILRSPM 976
Qy 961 KEPTTTPGRIILNFSKMDVDVRLPQAMFIONVILVFCVGMATAGVPFWLVAVGP 1020
Db 977 KEPTTTPGRIILNFSKMDVDVRLPQAMFIONVILVFCVGMATAGVPFWLVAVGP 1036
Qy 1021 LVILFVLAHYSRVLIRLKLNDINTOSPFLSHITSSIOGLATIHANYKGOEFLHRYOEL 1080
Db 1037 LVILFVLAHYSRVLIRLKLNDINTOSPFLSHITSSIOGLATIHANYKGOEFLHRYOEL 1096
Qy 1081 LDDNOAPEFLETCAMRWLAVALDLISALITTTGMLIVLMHGOIPPAVAGLAISAVOLT 1140
Db 1097 LDDNOAPEFLETCAMRWLAVALDLISALITTTGMLIVLMHGOIPPAVAGLAISAVOLT 1156
Qy 1141 GLPQFTVRLASSETFARTSVIRINHYIKTSLSEAPARKKNAKPSDMPDQSEVTFENNAEM 1200
Db 1157 GLPQFTVRLASSETFARTSVIRINHYIKTSLSEAPARKKNAKPSDMPDQSEVTFENNAEM 1216
Qy 1201 RYRENLPVLAKKVSFTIYKPKKIGIVGRTSGKSLGMAFLRLVELSGCCIKINGVRISD 1260
Db 1217 RYRENLPVLAKKVSFTIYKPKKIGIVGRTSGKSLGMAFLRLVELSGCCIKINGVRISD 1276
Qy 1261 IGLADLRKSLIIPQEVPLFSGTVRSNLDPENOYTEDQIMDALERTHMKETIAOLPLKLE 1320

Db 1277 IGLADLRKSLIIPQEVPLFSGTVRSNLDPENOYTEDQIMDALERTHMKETIAOLPLKLE 1336
Qy 1321 SEVMENGDNFVSGEROLLCIARALLRHCKILILDEBATAAMDTEFDLLIOETIREAFADCT 1380
Db 1337 SEVMENGDNFVSGEROLLCIARALLRHCKILILDEBATAAMDTEFDLLIOETIREAFADCT 1396
Qy 1381 MLTIAHRLHTVLGSDRIMVLAOGVVEEDTPSVLLSNDSRFYAMFAAENKVAVKG 1437
Db 1397 MLTIAHRLHTVLGSDRIMVLAOGVVEEDTPSVLLSNDSRFYAMFAAENKVAVKG 1453

RESULT 4
US-08-463-092B-4
; Sequence 4, Application US/08463092B
; Patent No. 5766880
; GENERAL INFORMATION:
; APPLICANT: Cole, Susan P. C.
; APPLICANT: Deeley, Roger G.
; TITLE OF INVENTION: ISOLATED NUCLEIC ACID MOLECULES ENCODING
; TITLE OF INVENTION: MULTIDRUG RESISTANCE PROTEINS
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PARTEQ RESEARCH & DEVELOPMENT INNOVATIONS
; STREET: Queen's University at Kingston
; CITY: Kingston
; STATE: Ontario
; COUNTRY: CANADA
; ZIP: K7L 3N6
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: ASCII text
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/463,092B
; FILING DATE: 05-JUN-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/966,923
; FILING DATE: 27-OCT-1992
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 26-OCT-1993
; FILING DATE: 26-OCT-1993
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/029,340
; FILING DATE: 8-MAR-1993
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/141,893
; FILING DATE: 20-MAR-1995
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Steeg, Carol Miernicki
; REGISTRATION NUMBER: 39,539
; REFERENCE/DOCKET NUMBER: Q1546
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (613) 545-2342
; TELEFAX: (613) 545-6853
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1531 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-463-092B-4

Query Match 28.5%; Score 2082; DB 1; Length 1531;
Best Local Similarity 34.5%; Pred. No. 2,5e-195;
Matches 488; Conservative 262; Mismatches 479; Indels 184; Gaps 21;

NAME: Steeg, Carol Mlernicki
 REGISTRATION NUMBER: 39,539
 REFERENCE/DOCKET NUMBER: 01551
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (613) 545-2342
 TELEFAX: (613) 545-6853
 INFORMATION FOR SEQ ID NO: 4:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 1531 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-08-460-907B-4

Query Match: 28.5%; Score 2082; DB 2; Length 1531;
 Best Local Similarity 34.5%; Pred. No. 2.5e-195;
 Matches 488; Conservative 262; Mismatches 479; Indels 184; Gaps 21;

100 PVDNAGLSCMPFSLSLARVAKKGLSMDVSLSKSSSDVNCNRRLERLMOEELNE 159
 209 PESSASFSLRITFWITGLI-VAGYRQPLEGSDLSLKNEDTSEQVYVPLVKMKKECAK 267
 160 V-----GPDAA-----SLRRVWIECRRLIL 181
 268 TRKQPKVYVSSKDPANQPKSSKVDANEVEALIVKSPQKEMNPSLFKVLYKTFGPEFLM 327
 182 STYCLMITOLAGSGPAFWKHLLEYTQATESLQYSLILVCLLLEIYRSLSLATWA 241
 328 SEFFKAIHDLMSGPO-ILKLKIKFVNDKADWOGYEYTVLLEFVACLOTVLHQQYFH 386
 242 LNRRTGVRLGATLTMAFKKILTKLNKIKES--LGLINLNCNDGOMFEAAVSGSLAG 239
 387 ICVSSMRKIKAVIGAVKRAALVITNSARKSTVGEIVNLMSVDAQEPMDLAYINNIWS 446
 300 GPVVALIGMIYNYILGPTGFLGSAVFILFYPAWMPASRLTAFFRRKCVATDERVOKN 359
 447 APLOVILALYLLMLNGLPSVLAVAVMLVYNNAVAMKTKTYQVAHMSKDNRIKLM 506
 360 EVLTITKFKIMAVKAFSOSVOKIREERRILIEKAGYFOSITVGAAPIVYVIAVYTES 419
 507 EILNGIKIKLYAMELAFKDKVLAIRQELKVLKKSAYLSAVGFTWVCTPFLVALCTFA 566
 420 VHTLGFED--LFAAOFYTVTVFNSMTFALKVPFVSKSISEASVAVDRKSLFMEBVA 477
 567 VYTTIDENNILDAQTAFVSLALEFNILFPLNIPWYISSVQASVSKRIRITLSHELE 626
 478 --MIKKPASP--HIKIEKNATLWADSSHSSTIONSPLTPMKKDKRASRGKKEVRQ 532
 627 POSIERRPVKDGGTNSITVRNATFTW----- 653
 533 LQRTQAVLAEOKGHLLDSDERPSPREEBKHHILGLRLORTLHSDLEIOEGKLVG 552
 654 -----ARSDPP-----TLNGITFSIPEGALVA 675
 593 ICGSVSGKTSLSALIGOWTLEGSIAISGTFAYVAAQOAILNATLRDNLLEGEKDEE 652
 676 VVGQVCGGSSLSLALAEKDKVEGVAIKGSAIVPQOAMIONDSIRENILLFGCOLEP 735
 653 RNSVNLSCCLRPDLALPSSDLTEIGERANLSSGORORISLARLYSDRSYIILDDPL 712
 736 YRSVIOACALLPDLILPSGDRTEIGEGVNLSSGQKQVSLARAVSNADYILDDPL 795
 713 SALDAVGNHINRSAL--RKLKSKTVLVYTHOLOLYLVDCDEVIFMKEGCITERGHEEL 770
 796 SAVDAGVGHRIEENVIGPGLMKNKTRILVTHSMSTLPOVDVIVVSGGKISMSGYOEL 855
 771 MNLNGDYATLF-----NNLL-----GTPPVEIN 795
 856 LARDGAFAEFLRTYASTBOEQAENGVTGVSFGKEAKOMEGMLVTSAGQOLORLS 915
 796 SKKEISGSKKSDGPKTKSIKKEKAVNPEEGOLVLEEKGGGSPWVSYVYIOAAGG 855

Db 916 SSSYSGDISRHHN---STAELOKAZAKKEETWKLMEADKAKQOTGOVKLTYWYDKAIGL 972
 QY 856 PLAFVLVIMAFMLNVGSTARSTWMLSYWIOGSGNTTVTGNETSVSDSKNDNHMOYYA 915
 Db 973 FISFLSTF-LFMCNHSALASNWMLSLMTDPIYNGT--QEHKRVLSYVAGALISOGI 1028
 QY 916 SIYALSMAVWLILKAIAGVAVFVKGTLRASSRLHDELFRRLIRSPMKFFDPTPTGILNRF 975
 Db 1029 AVFGYSMAVSI-----GGILASRCLHYDLHSLIRSPMSFFERTPSGNLVNRF 1076
 QY 976 SKDMDEVDRPLPQAEFNIQNVILVFPFCVGMIAVGPFWPLVAVGPLYLFSVLHIVSRVL 1035
 Db 1077 SKELDTVDSMIPETVKKFMGSLFNVIGACIVILLATPIAHIIPELGLI---FFVGRFY 1133
 QY 1036 I---RELKRLDNTIOSPFLSHITSSIOGLATTHAANKGOEFLHRYOELLDNQAPFLFT 1092
 Db 1134 VASSRQRLRESVSRSPVSHFNETLLGVSVIRAFEOERFIHQSDLKVENOKAYPSI 1193
 QY 1093 CAMRWLAVRDLISALITTTGLMIVLMHQIIPAVAGLAISYAVOLTGLFOFTVRLASE 1152
 Db 1194 VANRWLAVRLECVGNCLVLFALPAVLSRHSLSAGLVLSVSTSLQVTTYLLNMLVRMSSE 1253
 QY 1153 TEARFVSERINHYIKTSLSEAPARIKNKAPSPDPOEGEVTEENAMARYRENPLVLKK 1212
 Db 1254 METNIVAVRLEKYESR-EKEAPWQIOETAPSPSSWPQVGVEFRNVCLARREDLDVLRH 1312
 QY 1213 VSFTIKKEKIGIVGRIGSSKSSIGMALFRLVLSGGCIIIDGVRIISDTGLADRSKLSI 1272
 Db 1313 INVTINGEVRVGIYGRGACKSSLTGLFIRINSABEELIIDGINAKIKIHLDRFKITI 1372
 QY 1273 IPOEPLYSGTSVNLDPFQNYTEDOIMDALERTHMECIAOLPLKISEVMENGDNFSV 1332
 Db 1373 IPQDPVLFSGSLRNLDLPFQYSDVEWTSLELAHLDFVSALPDKLDHRCABEGEALSV 1432
 QY 1333 GERQLCIARALRHCKILILDEATAAMDYETDLLOETIREAFADCTMLTIAHRLFTVL 1392
 Db 1433 GQRLQVLARALLRKTLILVDEATAVDETDLQSTIRTOGEDCTVLTIAHRLNTIM 1492
 QY 1393 GSDRIWLAOGOVEFPTPSVLLSNDSSRYAM 1425
 Db 1493 DYTRVIVLDKGEIOEYEGAPSDL--QQRGLFYSM 1524

RESULT 7
 US-08-463-179A-4
 ; Sequence 4, Application US/08463179A
 ; Patent No. 6001563
 ; GENERAL INFORMATION:
 ; APPLICANT: Cole, Susan P.C.
 ; TITLE OF INVENTION: METHODS FOR IDENTIFYING CHEMOSENSITIZERS
 ; NUMBER OF SEQUENCES: 6
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: LAHIVE & COCKFIELD
 ; STREET: 60 State Street, suite 510
 ; City: Boston
 ; STATE: Massachusetts
 ; COUNTRY: USA
 ; ZIP: 02109
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: ASCII text
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/463,179A
 ; FILING DATE:
 ; CLASSIFICATION: 536
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: 07/966,923
 ; FILING DATE: 27-Oct-1992
 ; APPLICATION NUMBER: 08/029,340
 ; FILING DATE: 8-MAR-1993

APPLICATION NUMBER: 08/141,893
 FILING DATE: 26-OCT-1993
 APPLICATION NUMBER: 08/407,207
 FILING DATE: 20-MAR-1995
 ATTORNEY/AGENT INFORMATION:
 NAME: DECORTI, GIULIO A. JR.
 REGISTRATION NUMBER: 31,503
 REFERENCE/DOCKET NUMBER: POI-002CP8
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (617) 227-7400
 TELEFAX: (617) 227-5941
 INFORMATION FOR SEQ ID NO: 4:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 1531 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-08-463-179A-4

Query Match 28.5%; Score 2082; DB 3; Length 1531;
 Best Local Similarity 34.5%; Pred. No. 2.5e-195;
 Matches 488; Conservative 262; Mismatches 479; Indels 184; Gaps 21;

QY 100 PVDNAGLESCMTFSLWLSLARAARKGELSMEDVMSLSKHESSDYNCRLERLMOEELNE 159
 DB 209 PESSASFLRLTFWMITGLI-VRGYRQPLEGSDLSLNKEDTSEQVNPVLYNMKKECK 267
 QY 160 V-----GPDAA-----SLRVVYIETCRLIL 181
 DB 268 TRKQDPKVVYSKDPKQPKRESSKYDANEVEALIVKSPQKEMNPISLFVLYKTFEPYFLM 327
 QY 182 SIYCMITQLAGSGPAPMVKHLEYTOATESNLQYSLVLGLLTETLRMSLALPMA 241
 DB 328 SFFPKAIDIMAFSPQ-ILKILITFVNDTKAPDMQGFYTVLLEVTACLOTLVLSHQYFH 386
 QY 242 LNYRTGRLKAILTMAERKILTKNIKES--LQELINICSNDOQRHEAAVAGSLAG 299
 DB 387 ICFVSGMRITKAVIGAVYKALVITNSARKSSTVEIYNLMSVDQRMDLATYINMTIS 446
 QY 300 GPVVAIIIGMIVNIIIGTGLGSAVFLTFPAMMFASRLTAFFRKCAVATDERVQKMN 359
 DB 447 APILOYITLILYLLMLNGSVLAGVAVLVAVPVNAVMAMKTKTYOVAMKSKDKNRIKILMN 506
 QY 360 EYLTYIKIRKMYAWYKAPSQSVOKIREERERILEKAGYFQSTYTCVARIIVIVASVTFES 419
 DB 507 EILNGIKVLKLYAMELAFKDKVLAIRQBELKVLKKSATLSAVGTFTWCTPPLVALCTFA 566
 QY 420 VHMILGFD-LTAAQAFVTVTVFNSTPFAKVTPEFSYKSLSEASVAVDRFKSLFMEEVH 477
 DB 567 VYVTIDENNIIDAOFAFVSALFNLIRPLNLPVNISSIVQASVSLKRLNIFLSHEBLE 626
 QY 478 --MIKNRPASP--HIKEMNATLANDSSHSIIONSFKLTPKMKKDKRASRKKKEKYRQ 532
 DB 627 PDSTIERRPVDDGGGTNSTITVNAFTW----- 653
 QY 533 LQRTHEQAVLAEQKGHLLDSDERSPEEKGKHIHLGLRLQRTLSIDLEIOEGKIYV 592
 DB 654 -----ASDDP-----TLNGITFSIEGALVA 675
 QY 593 ICGSVSGKTSLSAILGOMTLLEGSAISGTFAYVAQAMILNATLNDLILFKEVDEE 652
 DB 676 VVGQVGGCKSSLSALLAEMDKVEGVAIKGSVAVYVQQAQIOMDISLRENTLFCQLEEP 735
 QY 653 RYNSVLSNCCRLPLALPSSDLTEIEBGRANLSGGQRORISARALYSRDSIYILDPL 712
 DB 736 YRSYVIOACALPDLPLEILPGSDRTIEGKGVNLSGGQKQFVSLARAVYSNADITYLDDPL 795
 QY 713 SALDAHGNHIFNSAI--RKHLKSVTLVFTHOGLYLVDOCEVTFMEGCTTEGTHBEL 770
 DB 796 SAYDAHGHKIIIFENVIPKGMKMKTKIILVTHSMSYLPQVDVITIVMSGGKISEGYSQEL 855
 QY 771 MNINGDVATTF-----NNILL-----GETPPEIN 795

DB 856 LARDGAFAEFLRYASTEDQDAENGVTGVSQPKGAOMENGMVLTTSAGKOLORLS 915
 QY 796 SKKEISGQKKSQDKPKTGSIKREKAVRPEEQOLVLEKGGQSVPMYVYVIOAGG 855
 DB 916 SSSSYSGDISRHHN---STAELOKABAKKEETWKLEADKAOQGVKLSVYMDYMAKIGL 972
 QY 856 PLAFIYMLFEMLVNSTAFSTWVLSYVNIKQSGNTVYRGNETSVSDSMKNPMMQYTA 915
 DB 973 FIFSLIF-LFMCNHYVALSNVLSLWTDPIVNT---QETHKRLSVYVALGISQGI 1028
 QY 916 SIYALSMAYVLLIKAIRGVYVFKGLRASSRLHDELFRRLISPMKFFPTPTGRILNRE 975
 DB 1029 AVFGYSMAVSI-----GGLASRCLHVDLHLSLSPMSFFERTSGNLVNF 1076
 QY 976 SKDMDEVDRLPDQAEFIONVILVEFCVGMAGVPMPLVAVGPVLVILSVLHYRVL 1035
 DB 1077 SKELDTVDSMIPEVIMKFMGSLFNIVGACIVILLATPIAAIITPLGLIY---FFVQRY 1133
 QY 1036 I---RELKRLDNIQSPFLSHITSSIQGLATHAYNKGGEFLHRYQELLDNQAPPELFT 1092
 DB 1134 VASSHQLKRLSEVSRSNPSVSHNETLLGVSVIRAEEDERFLHQSDLKVDENQKAYPSI 1193
 QY 1093 CAMRMLAVRLDLISALITTTGTMIVLMHGOIPPAVAGIATSYAOLGLOFTYRLASE 1152
 DB 1194 VANRMLAVRLDEYGVKCIYFALFAVISRHSLSAGLVGLSVSYLQVTTYLMMLVPMSE 1253
 QY 1153 TEARTSVVERINHYIKTLSLEAPARIKNKAPSPDPOEGEVFFENAEKRENPULVLRK 1212
 DB 1254 METNIAVAERLKEYSET-EKEAPMOIQETAPSSMPQVGRVFEFRNYCLRYREDLQVLRH 1312
 QY 1213 VSFITKPKREKIGIVRTSGSKSSLGMAFLRVELSGCCIKIDGVNISIDIGLADLSKSI 1272
 DB 1313 INVTTNGEKRVGIVGTAGKSSLTGLGRINESAEGEIIIDGINIAIGLIDLEFKITI 1372
 QY 1273 IPQEPVLFSGYVRSNLDPEFNOYTEDOIMDALERTHMKECIAQLPIKLESEVENENDNSV 1332
 DB 1373 IPQDVLVFGSLRMULDPEFSQSDSEVWTSLELAHLKQFVSLPKLDHECBEGENLSV 1432
 QY 1333 GEROLLCTARALLRHCILILDEATAAMDTELDLLOETIRBAFADCTMLTIAHNLATVL 1392
 DB 1433 GORQLVCTARALLRKTILVLEDEATAVADLETDLQSTIRQFQDCVLTFAHRLNITM 1492
 QY 1393 GSDRIMVLAQGVAFEDTPSVYLSNDSRFFAM 1425
 DB 1493 DYTRVIVLDKGELOEYGAPSDL-QQRLGFYSM 1524

RESULT 8
 US-08-461-384B-4
 Sequence 4, Application US/08461384B
 Patent No. 6025473
 GENERAL INFORMATION:
 APPLICANT: Cole, Susan P. C.
 APPLICANT: Deeley, Roger G.
 TITLE OF INVENTION: MULTIDRUG RESISTANCE PROTEINS
 NUMBER OF SEQUENCES: 10
 CORRESPONDENCE ADDRESS:
 STREET: Queen's University & DEVELOPMENT INNOVATIONS
 CITY: Kingston
 STATE: Ontario
 COUNTRY: CANADA
 ZIP: K7L 3N6
 COMPUTER READABLE FORM:
 MEDIUM TYPE: floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: ASCII text
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/461,384B
 FILING DATE: 05-JUN-95
 PRIOR APPLICATION DATA:

APPLICATION NUMBER: 07/966,923
 FILING DATE: 27-OCT-1992
 APPLICATION NUMBER: 08/029,340
 FILING DATE: 8-MAR-1993
 APPLICATION NUMBER: 08/141,893
 FILING DATE: 26-OCT-1993
 APPLICATION NUMBER: 08/407,207
 FILING DATE: 20-MAR-1995
 ATTORNEY/AGENT INFORMATION:
 NAME: Steeg, Carol Miernicki
 REGISTRATION NUMBER: 39,539
 REFERENCE/DOCKET NUMBER: Q1547
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (613) 545-2342
 TELEFAX: (613) 545-6853
 INFORMATION FOR SEQ ID NO: 4:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 1531 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-08-461-384B-4

Query Match 28.5%; Score 2082; DB 3; Length 1531;
 Best Local Similarity 34.5%; Pred. No. 2,5e-195;
 Matches 488; Conservative 262; Mismatches 479; Indels 184; Gaps 21;

QY 100 PVDNAGTSCMTSWISLARVAHAKGELSMEDVSLSKHSSDVNCRRLERLMOEELNE 159
 B 100 PVDNAGTSCMTSWISLARVAHAKGELSMEDVSLSKHSSDVNCRRLERLMOEELNE 159
 DB 209 PESSASFLRITFWITGLI-VRGYRQPLEGSDLMSINKEDTSQVAVLVKMKKCKAC 267
 QY 160 V-----GDDA-----SLRRVWIFRTRIL 181
 DB 268 TRQPAKVYVSSKDPQPKSSKVDANEVVALIVKSPQKWNPSLKVYKTFGPYFLM 327
 QY 182 SIYCLMTOLAGEGSPAFVWKHLEYQATSNLYSLVLGLLEIVRSMSLALTLWA 241
 DB 328 SPFFKAIHDMFSGPG-IKLLIKFVNDKAPDMOGYFTVLLFVACLOTVLHGYH 386
 QY 242 LNRTRVRLGAILTMAFKILIKLIKES--LGLINISNGGMRFEAAVGSILAG 299
 DB 387 ICVSVGRITAVIYAVYRRALVITNSARKSTVEIYINLSVDAQFMDATYINIMWS 446
 QY 300 GPVAILIGMIVNIIIGPTGELSAVILFYPAAMFASRLATYRRRCVATDERVOKN 359
 DB 447 APLOVIALTLMLNLSVLAGVAVVAVPNAVNAAMTKTYQVAMHMSKDRIRIKLN 506
 QY 360 EVLTYIKFIMYAVKAFSOSVOKIREERRILEKAGYFOSITVGVAPIVVIASVTF 419
 DB 507 EILNGIKVLKLYAMELAFKRYALAIROBELKVLKKSAYLAVGFTWVCPELVALCTFA 566
 QY 420 VHTLGED--LTAQAFTVTVNSMTFALKVTPFSVKSLEASVAVDRKSLFLMEVH 477
 DB 567 VYVTIENNILDAQTAFAVSLATFNILFPLNIIPLMVISIYQASVSKRLRIFLSHELE 626
 QY 478 --MIKNPASP--HIKIEKNATFLADSSHSSTQNSPKILPKKKKRSRKKKEVQR 532
 DB 627 PDSIERPVVGGGTSITVKNATFTW----- 653
 QY 533 LQRTHOAVLAOKGHLLDSDRPPSEEEKHHLGRLQRTLSIDIEQKIYV 592
 DB 654 -----ARSDPP-----TLNGITFSIEGALVA 675
 QY 593 ICGSVSGKTSLSAILGOMTLLEGSLAIGTAPYVAQAMWILNATIRDNILFEKYEDEE 652
 DB 676 VVGQVGGKSSLSALIAEDMKVEGVAIKGSVAYVPOAMIONDSIRENITFCQCLEEP 735
 QY 653 RYNSVNSCCLRDIALTPSSDLTEIGERGANISGCGORATSLARALYSRSTIILDDPL 712
 DB 736 YKSVIOACALPDLPLTEPGDRETEGKGVNSGGQKORSLARAVYSNADYILFLDDPL 795
 QY 713 SALDAVHGHIFNSAI--RRHLKSKTVLFTVHQLQYLVDCEDEVIFMEGCTTERGTHEEL 770

DB 796 SAVDAHVCKHIFENVIGKGLKKNKTRILVTHSMKYLEQOVVLIYMSGKISKMSYDEL 855
 QY 771 MNLNGDYATIF-----NNLL-----GEPPEVEIN 795
 DB 856 LARDGAFAPFLRTYASTREQDAEENGVTYGVSGPKAKQOMENGLVYDSAGKQLQROL 915
 QY 796 SKKETSGQKKSQDKPRTGSIKKEKAVKPEEQVLQVEEGGSGSPVSVYIQAAGG 855
 DB 916 SSSSVSGDISRHHN--STAELQKAEAKKETWKLMEADKQOTQVLSYWDYKALGL 972
 QY 856 PLAFVIALFMLVNGSTAFSTWMLSVYIKGSGTQVTRQENETSVSDMKNPMQYVA 915
 DB 973 FISELSIF-LMCHNVSLAANYMLSLMTDPIYNGT---QEHKRVLSYVGAIGISGI 1028
 QY 916 SIYALSMVAMLLKAIKRGVVFVKGLTRASSRLHDELFRILRSPKPEEDTPPTGRIINR 975
 DB 1029 AVFGYSMAVSI-----GGLASRCLHDLHSLRSPSPFERTPGCNLVNRF 1076
 QY 976 SKDDEVDVRLPQAEMLQVILVFCVGVAGVFPFELVAVGPVILFSLVHYSVL 1035
 DB 1077 SKELDTVDSMLPEYIKMFGSLFNVIGACIYILLATPIAATIIPLGLITY--FFVQRFY 1133
 QY 1036 I---RELKRLDNTQSPFLSHITSSIOGLATIHAVNKGQFLHRVQELLDDNOAPFLFT 1092
 DB 1134 VASSROLKRLSESVRSYSHFNELTGLSVYIRAFEDERRIHOSDLKVDENOKAYPSI 1193
 QY 1093 CAMBLAVRLDLISALITTTGLMIVLHGOIPPAVAGLAIYAVOLTLGFQFTVRLASE 1152
 DB 1194 VANRLAVRLCVCNCLIFALPAVVISRHSLSAGVGLSVSYLQVTTVYINMLVRRMSE 1253
 QY 1153 TEAFVTSYERINHIKLSLEAPARIKKNASPMPOGVEYTFEAKERYENPLVYK 1212
 DB 1254 METNIVAVRLKESYET-EKAPWQIOTETAPSSMPQVGRVFNRYCIRYREDDEFLVRH 1312
 QY 1213 VSFTIKREKIGIYGRGSSSLGMAFLRVLVLSGGCIKIDYRISDIGLADLRSLSI 1272
 DB 1313 INVINGEKAGIYGRGAGSSSLTGLFRINESAEGIIIDGINAIKGLHDLRFKTI 1372
 QY 1273 IPQEPVLESGTVNSLNDPEFNOYTEDQIWDALERTHMKECIAOLPKLISEVMEGDNFSV 1332
 DB 1373 IPQEPVLESGTVNSLNDPEFNOYTEDQIWDALERTHMKECIAOLPKLISEVMEGDNFSV 1332
 QY 1333 GEROLCIARLLRHCKLIIIDEAPAMDPTDILLIOETIEAPADCMILTAHRLHYL 1392
 DB 1433 GQROLVCLARLLKRTKILVIDEATAVADLETDDLIQSTIFQEDCTVLTIAHRLTIM 1492
 QY 1393 GSDRIWLAQGOVEFPDPSVLLSNDSSRFYAM 1425
 DB 1493 DYTIVYLDKGEIDYCAPSLL-QQKGLPYSM 1524

RESULT 9
 US-08-141-893-2
 ; Sequence 2, Application US/08141893
 ; Patent No. 5489519
 ; GENERAL INFORMATION:
 ; APPLICANT: Deeley, Susan P. C.
 ; APPLICANT: Deeley, Roger G.
 ; TITLE OF INVENTION: MULTIDRUG RESISTANCE PROTEIN
 ; NUMBER OF SEQUENCES: 2
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: LAHIVE & COCKFIELD
 ; STREET: 60 STATE STREET, SUITE 510
 ; CITY: BOSTON
 ; STATE: MASSACHUSETTS
 ; COUNTRY: USA
 ; ZIP: 02109
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: PatentIn Release #1.0, version #1.25


```

NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
ADDRESSEE: LAHIVE & COCKFIELD
STREET: 60 State Street, suite 510
CITY: Boston
STATE: Massachusetts
COUNTRY: USA
ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: ASCII text
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/462.109A
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/966, 923
FILING DATE: 27-OCT-1992
APPLICATION NUMBER: 08/029, 340
FILING DATE: 8-MAR-1993
APPLICATION NUMBER: 08/141, 893
FILING DATE: 26-OCT-1993
APPLICATION NUMBER: 08/407, 207
FILING DATE: 20-MAR-1995
ATTORNEY/AGENT INFORMATION:
NAME: DeConti, Giulio A. Jr.
REGISTRATION NUMBER: 31,503
REFERENCE/DOCKET NUMBER: P01-002CP4
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 227-7400
TELEFAX: (617) 227-5941
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 1531 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-462-109A-2

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Query Match      28.48; Score 2075; DB 2; Length 1531;
Best Local Similarity 34.58; Pred. No. 1.2e-194;
Matches 487; Conservative 261; Mismatches 481; Indels 184; Gaps 21;

QY 100 PYDAAAGLFCSCWTFEWSLSSLAIVAHKKGSLSMEDVWSLSKSHSSDVNCRRLERLMOEELNE 159
DB 209 PESSASFLSRITFWITGLI-VRGYROPLEGSDILMSLNKEDTSEQVYVFLVKNMKKECAK 267
QY 160 Y-----GPDAA-----SLRVRVNIFFCTRLIL 181
DB 268 TRKQPVKVVYSSKDPAPQPKESKSKVDANDEVALIVYKSFQKEMNPSLEFVLKKTGPPFLM 327
QY 182 STYCLMTTQLAGSGPAPFWKHLLEYQATESNLQYSLILVILGLITEIVWSMIALTWA 241
DB 328 SFEFKAIHDMFMFGPQ-ILKLIRKFNVDKAPDMQGFYVLLFVACLOTLVLHQGFH 386
QY 242 LNTYTGVRILGAILTMAFKTLIKLNKES--IGELINICSDNGQRMFEAAVAGSLAG 299
DB 387 ICFVSGKRITTAIVIGAVYRRAVLITNSARKSSIVGEIYNILMSVDAQRFMDLATYINMWS 446
QY 300 GPVAAIGMIVNVIILGPTGFLGSAVFLIFPAMMFASRLTAHYRRKCVATDERVOKM 359
DB 447 APIQVILALVLMNLNLPSTVLAGVAVVLAIVNAVAMKTKTYQVAMHMSKDRIRKLM 506
QY 360 EVLTITIKFIMYAVAKFSOSVOKIREERIRLEKAGYFOSITVGVAPIVVIVIASVYFS 419
DB 507 EIIINGIKVLKIAMELAKFKVLAIROELKVLKKSAYLSAVGFTWVCIPFLVATCTFA 566
QY 420 VHTLGLD--LTAQAFTVTVFNSMTFALKVTPESVKSLSASAVADRKSLELMEVH 477
DB 567 VYVITDENNIIDQATAFVSLATFLNIFPLNIFPMVIVISSIVQASVSLKRLRIFLSHELE 626

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QY 478 --WIKKPPSP---HIKIEKNATLAMDSSHSSIONSPLTPMKKDKRASRGKKERYO 532
DB 627 PDSIERRPVKDGGGTNSITVRNATFTW----- 653
QY 533 LQTEHQAVLAEQKHLLDSDERPSPREEGKHILGHLRLQRTLHSLDLEIQECKLVG 592
DB 654 -----AKSDP-----TLNGTFTFSIPEGALVA 675
QY 593 ICGSVSGKTSLSLAILAGMTLEGSIAISGTFAYVAOAMILATLRNILEFGKRYDEE 652
DB 676 VVGQVCGKLSLSLALLAEMDKVEGHVALKGSVAVYPOQAMQONDSLRNILLFGCLEEP 735
QY 653 RYNSVNSCCLPBDLAILPSSDLTEIGEGANISGGQORISLARALYSDRSLYILDDPL 712
DB 736 YRSVYIQAOLLPDELILPESGRTTEIGEGVNLSGQOKORVSIARAVYSNADYILFDDPL 795
QY 713 SALDAHVNHIFNSAI--KKHLKSKVLVTVHQQLVYDCDEVIFPKKECITERGTHEEL 770
DB 796 SAVDAHVGHKIFENYVIGPKMLKNKTRILVTHSMSTLPQVDYIVWSGGKISEMSYQEL 855
QY 771 MNLNGDYATIF-----NNTLL-----GETPVEIN 795
DB 856 LARDGAFAEFLRTYASTEQEDAENGVTGSGPKGEAKOMENGMILYTDLSAGKQLOQDS 915
QY 796 SKKETSGSQKSDQDKPKTGSIKKERAVKPEBGQLVLEEKQGSVPMSVYGVYIOAAG 855
DB 916 SSSYSQGISRHHN---STAELOKAKEAKKEETWKIMEADKQGTQGVKLSVYDMYKAIGL 972
QY 856 PLAFIYVIALFPLNYGSTFTFWLTSYWKQSSGNTTYTRGNETSVSDMKRNPMMQYIA 915
DB 973 FLSFLSIF-LFPCNHNVSALASNTWLSMTDDPIVGT--QHTVYRSLVYCALGISOGI 1028
QY 916 STVALSMAVMLLTKAIRGVVFEKGTILRASRRHLDELFRILRSPKFFDTPTGRILNRF 975
DB 1029 AVFGYSMAVSI-----GGILASRCHLVLDLSILRSPSEFERTPSGMLVRF 1076
QY 976 SKDMDEVYRLPFOAEMFQNIIVLFVCGVMTAGVPMFVLAAGPLVILFSYLHVSRL 1035
DB 1077 SKELDTVSMIPEVIMKMGSLFNIVGACIVILLATPIAIIIPILGLIY--FVQGRFY 1133
QY 1036 I---RELKRLDNTIOSPFLSTTSIOGLATYHANNKOEFLHRQOELLDNQAFPLFT 1092
DB 1134 VASSQQLRLRESVSPVYSHENETLLGVSVTRAEEDEERLHQSDLKVDENOKAYPSI 1193
QY 1093 CAMRLAVRLDLISALTITTTGLMIVLMHGQIPRAYAGLAISYAVOLTGLFOFTVRLASE 1152
DB 1194 VANRLAVRLBOYGCIVLPALFAVVISRHSLSAGVLGSLVSYQVTTYLNLWLVYRMSSE 1253
QY 1153 TEARTSVYERINHYIKTUSLEAPARIKKNKADSPDMPOGEVTFENAEKRYRENTPLVLK 1212
DB 1254 METNIVAVERLKEYSET-EKEAPMOIOETRPSSWPQVGRVFEFRNYCLRYREDLDFVLRH 1312
QY 1213 VSFTIKPEKIGIYGRGSSGSLGMAFLRVELVLSGCGIKIDGVARISDIGADLRSKSI 1272
DB 1313 INVITINGEKGIVIRGAGSSSLTGLGFRINESAGEIITIDGINAIIAGLHDLRFKTTI 1372
QY 1273 IPOEVLFSGTVRSNLDPFNQYTEDQIDALEFTHMKCIAQPLKLESEVMEGNDNSV 1332
DB 1373 IPOBPVLFSSGLRNNDLPFSQYSDPEVWTSLJELAHKADFYVALDPKDLHCEABEGENLSV 1432
QY 1333 GEROLLICARALLRHCKLILDEATTAAMDTEDDLIOETIREADPCTMLTIAHRLTVL 1392
DB 1433 GOROLVCIARALLRKTKILVDEATAVADLETDLLIOSTIRTOEDCTVLTIARIMTIM 1492
QY 1393 GSDRIMVLAOGVYVEFTPSVLNSDSSRFYAM 1425
DB 1493 DTYRVIVLDGEIDGYAPSDL--QQRGLFYSM 1524

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RESULT 12
US-08-460-907B-2
; Sequence 2, Application US/08460907B

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: Patent No.55891724
:
: GENERAL INFORMATION:
:
: APPLICANT: Deeley, Roger G.
: APPLICANT: Cole, Susan P.C.
: TITLE OF INVENTION: METHODS FOR CONFERRING MULTIDRUG
: TITLE OF INVENTION: RESISTANCE ON A CELL
: NUMBER OF SEQUENCES: 9
:
: CORRESPONDENCE ADDRESS:
: ADDRESS: PARTO RESEARCH & DEVELOPMENT INNOVATIONS
: STREET: Queen's University at Kingston
: CITY: Kingston
: STATE: Ontario
: COUNTRY: CANADA
:
: ZIP: K7L 3N6
:
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: COMPUTER: IBM PC compatible
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: ASCII text
:
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/460,907B
: FILING DATE: 05-JUN-1995
: CLASSIFICATION: 424
:
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: 07/966,923
: FILING DATE: 27-OCT-1992
: CLASSIFICATION: 424
:
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: 08/029,340
: FILING DATE: 8-MAR-1993
: CLASSIFICATION: 424
:
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: 08/141,893
: FILING DATE: 26-OCT-1993
: CLASSIFICATION: 424
:
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: 08/407,207
: FILING DATE: 20-MAR-1995
: CLASSIFICATION: 424
:
: ATTORNEY/AGENT INFORMATION:
: NAME: Steeg, Carol Mternicki
: REGISTRATION NUMBER: 39,539
: REFERENCE/DOCKET NUMBER: 01551
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: (613) 545-2342
: TELEFAX: (613) 545-6853
:
: INFORMATION FOR SEQ ID NO: 2:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 1531 amino acids
: TYPE: amino acid
: TOPOLOGY: linear
:
: MOLECULE TYPE: protein
:
: JS-08-460-907B-2

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[illegible]

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D	b	447	APLOVITLALYILMLNGLPSVLAVGAAVWVLVPVNAVMAMKTQYQVAAHMKSKDNKILMAN	506
Q	y	360	EVLTYIFIKIMYAKVAFSOSVOKTIBDEBRILIEKAGTQOSTITVGAPLTVIVIASVTFPS	419
D	b	507	EILNGIVLKLAMELAFKDKVLAIRQBELKVLKKSAYLSAAGFTWCTPPLVALCFPA	566
Q	y	420	VHMILGFD--LTAQAFVTYVNSMTFALKVPEFVKSLSESAVADFKSLFAMEVH	477
D	b	567	VYTIIDENILDAOTAFVATLNFILFPLNIPWISSIVQASVSLKRLRFLTSHSELE	626
Q	y	478	--MKRNPASP--HIIEKNKNTLAWDSHSSIQNSPKLTFRMKKDKRASGRKEKVRQ	532
D	b	627	PDSEIRPRVVDGGTNSITVRNATFPM-----	653
Q	y	533	LQRTFHQAVLABOKGHLLDSDERPSPDEBECKHILGHRLQRTLHSLDLEIOGKLVG	592
D	b	654	-----ARSDPP-----TLNGTIFISPGALVA	675
Q	y	593	ICGSVSGSKTSLISAILGOMTLLGSLAISGCPFAVYAOQAAMLNTLRNLIKGEVDE	652
D	b	676	VVGVGVGCKSLLSALLAEWDKVEGHVALKGSVAAYVPOQAOMQNSLRNLEIFGQLEBP	735
Q	y	653	RYNVLVNSCCRLPDLATLPPSSDLTEIGERCANLSCGQORISLARALYSDRSYTLDDPL	712
D	b	736	YRVSIVQACALPLPDLTEPBGDRTEIGEKVYNLSGGQKRVSLARAVYSNADITYLFDDPL	795
Q	y	713	SALDAVHNHIFNSAI--RKHLSKTYLVLPYHQLOYLDCDEVIFEMKBEGCITERGTHEEL	770
D	b	796	SAYDAHGKHIFENVIGPRKMLKNKTRILVTHSMYSLPQDVYIWMGSKISEMSQYOL	855
Q	y	771	MLNLGDYATIF-----NNLL-----GEPPEVFIN	795
D	b	856	LARGAFAEFLRYASTEDQDQDAEENGVTGVSQPGKEAKOMENGLMYLDSACKQOLQROLS	915
Q	y	796	SKKFTSGSOKKSOBKGPKTGISIKKEKAVRPEEGOLVQLEEKQGSVPMSVGYVIOAAG	855
D	b	916	SSSSTGSDISRHNH---STAELOKAEKKEETMKLMEAKQATGCVKXLSYVDYKKAIGL	972
Q	y	856	PLAFVITMALFMLVNSTAFSTWMLSYWIKQSGNTVTYRGNETSVSMDKNDPMHOYYA	915
D	b	973	FISPLSIF--LFMCNHSVALSNYMLSLMDDPRLVNGT---QEHTKRSLSVGALGISOI	1028
Q	y	916	STYLSAAMVMLILKATIGVYFVNGTLRASSRLHDELFRILRILSPMKFETPTTGAILURF	975
D	b	1029	AVFEGSAVNSI-----GGILASCLHVDLHLSILRSPMSFEKPRSGMLVNRF	1076
Q	y	976	SKDNDEVDVRLPEQAEMEFIONVILVEFCVGMAGVPEWFLVAVGPVILFVSLHIVSNVL	1035
D	b	1077	SKELDIDYDSMIPFYIKFMQSLSPNVIGACVILLATPFIALLIIPPLGLY---FVQGRFY	1133
Q	y	1036	I---RELKRLDNTIOSPFLSHITSIOGLATTIHAYNKQGOFLHRYQOELDQNAQBPFLFT	1092
D	b	1134	VASSROQLKRLESRSRVSYPYHFMETLILGYSVIAFAPEQGRPIHQSDLKVDENQAKYAPSI	1199
Q	y	1093	CAMRWLAVRDLISALITTTGMLVLMHQDPRATVAGLAISYAVOULGLOFYVRLASE	1155
D	b	1194	VANMWLVLRLECQNCVTLERPAALFAYISRHSLSAGLVGSVSLQVTTYLLMWLVMRSE	1235
Q	y	1153	TEARFTSVERLNHYIKTLEAPARIKKNAKSPDMPOQEBEYFENAEKMYRENLPVLVKK	1212
D	b	1254	METNIVAVERKKEJSEI--EKEDAPWQIOETRRPPSWMQVGRVERFRNYCLTRYRDDLPVLRH	1312
Q	y	1213	VSPTIKREKIKIGVIGRTSGKSSLGMAELFRLVELFSGCIRKIDGVRISDGLADLSKLSI	1277
D	b	1313	INVTINGGEKGVIGVIRGACKSSLTGLGRINESAAGEIITIDGINIAKIGLHDLAFKTIY	1372
Q	y	1273	IPQRPVYFSGTVANSNDPQNOYTEDDIOALEPETHHKECIOADPLKLBSEVENQDNDSY	1332
D	b	1373	IPQRPVYFSGTVANSNDPQNOYDEEYVWSLELAHKLDEVSALPKRLHDECAEGEENLSY	1432

QY 1333 GEROLLCIARALLRHCKITLIDDEATAMPTENDLLOETIREAFADCTMLTAHRLHTVL 1392
 Db 1433 GOROLVCARALLRKTKITLIDDEATAMPTENDLLOETIREAFADCTMLTAHRLHTVL 1492
 QY 1393 GSDRIMVLAQGVVEDEPSPVLLSNDSSRFYAM 1425
 Db 1493 DTRVIVLIDKGEIQEYGAAPSDL-QORGLFYSM 1524
 RESULT 13
 US-08-463-179A-2
 Sequence 2, Application US/08463179A
 Patent No. 6001563
 GENERAL INFORMATION:
 APPLICANT: Cole, Susan P.C.
 APPLICANT: Deeley, Roger G.
 TITLE OF INVENTION: METHODS FOR IDENTIFYING CHEMOSENSITIZERS
 NUMBER OF SEQUENCES: 6
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: LAHIVE & COCKFIELD
 STREET: 60 State Street, suite 510
 CITY: Boston
 STATE: Massachusetts
 COUNTRY: USA
 ZIP: 02109
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: ASCII text
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/463,179A
 FILING DATE:
 CLASSIFICATION: 536
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: 07/966,923
 FILING DATE: 27-OCT-1992
 APPLICATION NUMBER: 08/029,340
 FILING DATE: 8-MAR-1993
 APPLICATION NUMBER: 08/141,893
 FILING DATE: 26-OCT-1993
 APPLICATION NUMBER: 08/407,207
 FILING DATE: 20-MAR-1995
 ATTORNEY/AGENT INFORMATION:
 NAME: DeConti, Giulio A. Jr.
 REGISTRATION NUMBER: 31,503
 REFERENCE/DOCKET NUMBER: PQI-002CP8
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (617) 227-7400
 TELEFAX: (617) 227-5941
 INFORMATION FOR SEQ ID NO: 2:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 1531 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-08-463-179A-2
 Query Match 28.4%; Score 2075; DB 3; Length 1531;
 Best Local Similarity 34.5%; Pred. No. 1,2e-194;
 Matches 487; Conservative 261; Mismatches 481; Indels 184; Gaps 21;

Db 328 SEFFKAIHDLMMFSGFO-LTKLTKFVNDTKAPDMOGIYYVLLVTAQLQTLVLAHQYH 386
 QY 242 LMYRGVRLGAILTMAFKKILKLNKIKES--LGLINICSGNDQRMFEAAVGSLLAG 299
 Db 387 ICFVSGMRKFTAVIGAVYKALVITNSARKSSYGVIVLMSVDQRFMDLATYINIMWS 446
 QY 300 GPVVALIGMIVYIILGPPIGSAVFILFYAMMPASRLTYAFRRKCAVATDERVQKN 359
 Db 447 APLQVILALYLLMLNIGSPVLGAVVAMVLMVPMVNAVMARKTKTYQVAAHMKSKDNRIKLMN 506
 QY 360 EVLTYIKFKIYAWYKAFSGVQKIREERRILKEAGYFQSTIGVAPIVVAVASVPS 419
 Db 507 EILNGIKYVILKAMELAERDKVLAIRQELKVLKKSATYLSAVGTTWCTPLVLAICTFA 566
 QY 420 VMTLGF--LTAQAFTVTVVFNMTFALKYTPFSVSLSEASVAVDFKSLFMEVH 477
 Db 567 VYVITDENNIDLAQTAFAFSLAFNLRPLNLTLPVIVISSYQASVSLKRLRIFLSHELE 626
 QY 478 --MINKPASP--HIKIEKNATLAMDSSHSSIONSPLKPKMKKDKRASKGKEKYRQ 532
 Db 627 PDSIRRPVKDGGTNSITVRNATFTW----- 653
 QY 533 LQRTHEQAVLAQKQHLLDSDRPSPEEBGKHHLGLRLQRTLSIDLEIOGKLYG 592
 Db 654 -----ARSDP-----TLNGITTSIPGALVA 675
 QY 593 ICGVSGSKTSLISAILQMTLLGSIASGTFAYVAQOAMLTNRDLNLFGEYDEE 652
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 QY 653 RYNSVLNSCCLRDLAIIPLSSDLTEIGERGANLSCGQORISLARALYSDSITLYDPL 712
 Db 736 YRSVYIQAQALLPDLIELPSGDRTEIGKGVNLSCGQORISLARAVYSMDIYLFEDPL 795
 QY 713 SALDAVGNHIFNSAI--RKHLSKTVLFVTHQLOLYVDCPEVIEPMKGCITERGHEBL 770
 Db 796 SAVDAHVGHKHFENYIGRKMLKNTKRLIYHSMYILQVDVITYMSGKISEMGSYEL 855
 QY 771 MNLNGDYATIF-----NNLL-----GETPPEVIN 795
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 QY 796 SKKETSGQKKSQDKGPKPTGSIKKKAYKPREGQVLQLEEGQGSVPMSYGVYIOAAG 855
 Db 916 SSSSYSGDISRHH--STAELQKAKEAKKEFWKLEADKQOTGVKLSYWDYKAIGL 972
 QY 856 PLAFVIALFELMLANGSTAFSTWMLSYWIKQSGNTVTRGNETSVSDSKMDNPWYYA 915
 Db 973 FISELSTF-LFMCNIVSALASNYHSLMTDPIYNGT--QEHKVRSLVYGAIGISGCI 1028
 QY 916 STYALSMAMVLLKAIKRGVVEVKGTLRASSRLHDELFRRLISPKKFEEDTPTGRLNRF 975
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 QY 1036 I---RELKRLNITQSPFLSHITSSIOGLATIHAVNKGQDFLHRQELLDNOAPFLFT 1092
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 QY 1093 CAMRLAVRLDLISALITTTGMLIVLMHGOIPAYAGLAISYAVOLTGLFQFVRLASE 1152
 Db 1194 VANRLAVRLDLCVNGCIYLFALFAVISRHSLSAGVIGLSYSLQVYTYINMLVRSSE 1233
 QY 1153 TEARTSYERINHYIKTISLEAPARIKKNAPSPDPOGEVTEFNAEKRRNPLVKK 1212
 Db 1254 METNIVAVERLEKEYSET-EKEAPWQIOETRPSSMPQGVAFEFNRYCLARREDIDFVLRH 1312
 QY 1213 VSFITIKPREKIGIVGRSGSSIGMALFRLVELSGGCIKIDGVRIISDGLADLRSLKI 1272

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QY 1273 IPEPVLFGSTVRSNDPFGNYTEDQIWDLETHKECIAOPLKLESVMENGDNFSY 1332
Db 1373 IPDPVLFSSSLRMNDPFSQYSDDEVWTSLELAHLKDFVSALPDKBHCACAGGELSY 1432
QY 1333 GEQQLICARALLRHCKILILDEATAMPDETLLIOETREAFADCTMLTIHRLHLY 1392
Db 1433 GQRQVLCARALLRKIKILVLEDAITAVALDETDLIOSTIRTOFEDCTVLTIAHRLMT 1492
QY 1393 GSDRMVLAOGVVEFDTPSVLLSNDSSRPYAM 1425
Db 1493 DYTREVIVLDKGEIYQEGAPSDLL-QQRGLEYSM 1524
RESULT 14
US-08-461-384B-2
Sequence 2, Application US/08461384B
Patent No. 6025473
GENERAL INFORMATION:
APPLICANT: Cole, Susan P.C.
APPLICANT: Deele, Roger G.
TITLE OF INVENTION: MULTIDRUG RESISTANCE PROTEINS
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: PARTEQ RESEARCH & DEVELOPMENT INNOVATIONS
STREET: Queen's University at Kingston
CITY: Kingston
STATE: Ontario
COUNTRY: CANADA
ZIP: K7L 3N6
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: ASCII text
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/461,384B
FILING DATE: 05-JUN-95
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/966,923
FILING DATE: 27-OCT-1992
APPLICATION NUMBER: 08/029,340
FILING DATE: 8-MAR-1993
APPLICATION NUMBER: 08/141,893
FILING DATE: 26-OCT-1993
APPLICATION NUMBER: 08/407,207
FILING DATE: 20-MAR-1995
ATTORNEY/AGENT INFORMATION:
NAME: Steeg, Carol Miernicki
REGISTRATION NUMBER: 39,539
REFERENCE/DOCKET NUMBER: Q1547
TELECOMMUNICATION INFORMATION:
TELEPHONE: (613) 545-2342
TELEFAX: (613) 545-6853
INFORMATION FOR SEQ. ID NO. 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 1531 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-461-384B-2
Query Match 28.4%; Score 2075; DB 3; Length 1531;
Best Local Similarity 34.5%; Pred. No. 1.2e-194;
Matches 487; Conservative 261; Mismatches 481; Indels 184; Gaps 21;
QY 100 PYVNAAGLFGSTVRSNDPFGNYTEDQIWDLETHKECIAOPLKLESVMENGDNFSY 1392
Db 209 PESSASFLSKRTITWITGLI-VGRYQPLGSDLMSLNKEDTSEGVVAVLVKMKKKCAK 267
QY 160 V-----GPDAA-----SLRRVWICRRLIL 181

Db 268 TRQPVKVVYSNDPQAPKREKSKVDANEVEALIVKSPQKEMWNPSEKVLVYKTEGPEFLM 327
QY 182 SIYCLMTIOLAGSGPAFMVKHLETOATESNUQSLVLGLLLEIYRNSSLATWA 241
Db 328 SFFPKAIDHDMFSGPO-ILKLILKEFVNDKPADMOGYFYTVLLFYVACQITLVLMQYFH 386
QY 242 LNRTOVRLGAILLTMFKILKLNKIKES--LGELINCSNDGOMFEAAVGSLLAG 299
Db 387 ICEVSGMRKTAIVIGAVYRALVITNSARKSVGEVLNLSVDAQFMDLATYINWIS 446
QY 300 GPVVAIIGMIVNYIILGPTGELSAVFIIFYPAMFEASRLTAERRCVATDERVQKM 359
Db 447 APLOVILAILLMLNLGSPVLAVAVVAVLVAVPNAVAMTKTYQVAMHMSKRNRIKLM 506
QY 360 EVLTYIKFIMYAVKAFSOSVOKIREERRILEKAGYFOSITGVAPIVVIASVTF 419
Db 507 EILNGIKVLKYLAMELAFKDKVLAIRQELKVLKSAVYLSAVGTFTVCTPFLVALCTFA 566
QY 420 VHMVTLGFD--LTPAQAFTVTVNSMTFALKVTPFSYKSLSEASVANDRKSLFMEVH 477
Db 567 VVYVTDENNILDAQTAFAVSLATFNILFPLNIIIPMVYSSIVQASVSLKRLITLSHELE 626
QY 478 --MIKNKPASP--HIKIEKNATLWMDSSHSIIONSPKLTTPMKKKDKRASRCKEKVRQ 532
Db 627 PDSIERRPVVDGGGTSITVYRNATFTY----- 653
QY 533 LQRTHOAVLAQKGHLLDSDERPSPEEBEGRHILGLRLORTLSIDLEIOEGKLVG 592
Db 654 -----ARSDPP-----TLNGITFISPEGALVA 675
QY 593 ICGSVSGKTSLSAILIGOMTLLGSAISGTAYVAQAMLNATIRDNILGKEVDEE 652
Db 676 VQVQVGGKLSLSTALAEKDKVGHVAILGSAVYVQQAIDQSDIRENILEGQOLEP 735
QY 653 RYNSVLSGCCRLPDLALIPSDLTIEGERANISGGORQRTISLARALYSRSTIYLDPL 712
Db 736 YRSVIOACALLDLDELPSGDRTEIGKEGVNLSGGQKQVSLARAYSNADITLFPDPL 795
QY 713 SALDAVGNHIFNSAI--RRLKSKTVLFVYHOLYVDCDEVILFMKEGCTERGHTEL 770
Db 796 SAVDAHVGHKIFENVIGPCKMLKTRILVTHSMSTLPQVDVILVMSGKISEKSGYOEL 855
QY 771 MNLNGVATIF-----NNLL-----GEPPEIN 795
Db 856 LARDGAFAELRTYASTQBDQDAEENGVTGSGPKEAKOMEGMLVTDGAGQLOLQLS 915
QY 796 SKKETSGSKSODKGPCKTGIKKEKAVKPEECOLVLEKGGQSVPMYGVYIOAGG 855
Db 916 SSSYSQSDISRHN---STAELOKAKEKKEETWKLMDAKAQOQVAVLSYVMDYKAIQL 972
QY 856 PLAFVYIMAFMLNVGSTAFSTWMLSYWIKQSGNTVTTRGNETSVSDSKNDPHMOYA 915
Db 973 FISFLSIF-LFMCNHNVALSNWMLSLMTDDPIYNGT--QEHTRVRLSYVAGALGISOI 1028
QY 916 SIYALSMAVMLILKATRGVAVFGTLRASSRLHDELFRLLRBSMKRFDTPPGRIINRF 975
Db 1029 AVFGYSMAVSI-----GGILASRCLHVDLHLSIRSPMSFEPTSGNLVNR 1076
QY 976 SKMDDEVDRLPFOAEFIONVILFPCVGMIGVPMFVAVGPIVLSVLHIVSRVL 1035
Db 1077 SKELDYDSMIPVYIKFMQSLRNVIGACIVILATITAIITIPPLGLIT---FFVQRFY 1133
QY 1036 I---RELKRLDNTQSPFLSHITSSIOGLATIHAYNKGQELRHRYOELLDNDQAPFLFT 1092
Db 1134 VASSRQKRLIESVRSRPSYHFNFTLIGVIVIRAFEEQERFIHOSDKVDENQAVYPSI 1193
QY 1093 CAMRWLAVRDLISALITTTGLMIVLMHGOIPRAYGLIASAVOULTGLQFTVRLASE 1152
Db 1194 VANRWLAVRLECVGNCTVPAALPAVYSRHSLSAGVLGSVSYLOVTTTLMNLVWRMSE 1253
QY 1153 TEARFTVERINHYIKTSLSEAPARIKNKAPSPDMQEGVTFENAMRYRENPLVLK 1212

Db 1254 METNIVANERLKEYSET-EKEAPWQIOETRPSPMPVGRVFRNVCILTRREDDPVLH 1312
Qy 1213 VETIKPREKIGIVGRSGKSLGMALFRLVELSGGCKIDGVASIDGLADLSKSI 1272
Db 1313 INVINGEKVIGVIRTAGSSSLTGLFRINESAGEIIDGINIAIKGLHDLFKITI 1372
Qy 1273 IEOEVLFSGVRSNLDPNNOYTEDQIDALERTHMEKICIAIPLKLESEVENGDNSV 1332
Db 1373 IEDPVLFGSISRLNLDPSQYSDEEVTSLMALHKOVSALPKLHDECAEGEENISV 1432
Qy 1333 GEROLLCIARALLRHCKLIIIDEATAANDTDLIOETIEAPADCTMLTAHRLATVL 1392
Db 1433 GOROLVCIALRLKRLKTLVLEATAAVALDETDLIOSTIETFOEDCVTLIAHRLNTIM 1492
Qy 1393 GSDRIWLAQOQVVEFDPYSLVLSNDSRFYAM 1425
Db 1493 DYFVIVLDKGEIGETGAPSDL-QORGLPISM 1524

RESULT 15
US-08-407-207A-2
Sequence 2 Application US/08407207A
Patent No. 46061621
GENERAL INFORMATION:
APPLICANT: Deeley, Roger G.
APPLICANT: Cole, Susan P.C.
TITLE OF INVENTION: ANTIBODIES TO A MULTIDRUG RESISTANCE PROTEIN
NUMBER OF SEQUENCES: 7
CORRESPONDENCE ADDRESS:
ADDRESS: PARTEQ RESEARCH & DEVELOPMENT INNOVATIONS
STREET: Queen's University at Kingston
CITY: Kingston
STATE: Ontario
COUNTRY: CANADA
ZIP: K7L 3N6
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: ASCII text
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/407,207A
FILING DATE: 20-MAR-1995
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/966,923
FILING DATE: 27-OCT-1992
APPLICATION NUMBER: 08/029,340
FILING DATE: 8-MAR-1993
APPLICATION NUMBER: 08/141,893
FILING DATE: 26-OCT-1993
ATTORNEY/AGENT INFORMATION:
NAME: Steeg, Carol Mternicki
REGISTRATION NUMBER: 39,539
REFERENCE/DOCKET NUMBER: 01512
TELECOMMUNICATION INFORMATION:
TELEPHONE: (613) 545-2342
TELEFAX: (613) 545-6853
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 1531 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-407-207A-2

Query Match 28.4%; Score 2075; DB 3; Length 1531;
Best Local Similarity 34.5%; Pred. No. 12e-194;
Matches 487; Conservative 261; Mismatches 481; Indels 184; Gaps 21;
Qy 100 PVNAGLFCMTFSWLSLARVAHKKGELMEDVWLSLSKHESSDVNCRRLERLQOEPLNE 159

Db 209 PESSASFSLRIFPMWITGLI-VRGYRQPLEGSDLSMLNKEDTSQGVVPLVKNMKKECAK 267
Qy 160 V-----GPDAA-----SLRWVMECTRLIL 181
Db 268 TRKQVKKVYSSKDDPAQKRESKVDANEVEALYKSPQKEMNPSLFVLYKTFGPFLM 327
Qy 182 STVCLMTQLAGFSGPAPMVKHLLEYTOATESNLQYSLVLLVGLLTLEIVSWSLALTW 241
Db 328 SEFFKAIDHLMFSGPO-ILKLLIKFVNDTAPMDQGFYVLLFVTLACLOTVLVHOYFH 386
Qy 242 LNYRIGVLRRAILLMAKRLIKLKNIKES--IGELINISNDGORMFEAAVAGSLIAG 299
Db 387 ICFVSGMRKITAIVGAVYRKALVITNSARKSSGTGEIVNLSVDAQRFMDLATIINMWS 446
Qy 300 GPVAILGMIYVNIILGPTGLGSAVFLEFPAMMFASRLTAIRKCAVATDERVOKAN 359
Db 447 APLOYIILALYLLMLNLGSPVLAVGAVVAVVAVVAVVAVVAVVAVVAVVAVVAVVAVV 506
Qy 360 EVLTYYIKFKYAVVAVVAVVAVVAVVAVVAVVAVVAVVAVVAVVAVVAVVAVVAVV 419
Db 507 EILNGIKVLYKAWELAPKOKVLAIRQELKVLKSAVLSVGFVTCVPEVALCTFA 566
Qy 420 VHMVLGPD--LEAQAFTVTVVNSMTFPAKVTPFSVKSLEASVAVDRKSLFLMEVH 477
Db 567 VYVVIDENNILDQAFAVSLALFNILFPLNIPVNISSIVQASVSLKRLRIFLSHELE 626
Qy 478 --MIKNKPASP---HIKIEKNATLAWDSHSSIQNSPKLTPMKKDKRASKRKKERVRQ 532
Db 627 PDSIERPVPVDDGGTNSITVKNATFTW----- 653
Qy 533 LQRTHQAVLAEOKGHLLDSDRSPSEERKHIHGLRLQRTLSIDLEOEGKLV 592
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Db 676 VVGQVCGKRLSLSLALAEKDKVEGHVATKSAVYVPOQAMQNDLSRENIILFGCOLDEP 735
Qy 653 RYNSVNSCCLRPDLALILPSSDLTEIGERGANGISGQORISLARLYSDRSTYILDDPL 712
Db 736 YRSVTAQACALLPDELILPDSGDTTEIGERGANGISGQORISLARLYSDRSTYILDDPL 795
Qy 713 SALDAHVGNHIFNSAI--RKHLSKTVLFVTHQOLVYDCDEYIFPKKECITERGHEEL 770
Db 796 SAVDAHVGKHFENYIGRGMILKNKRLIYTHSMSTLPQVDVIVVSGKISEMSYQEL 855
Qy 771 MNLNGDYATIF-----NNTLL-----GETPPEVIN 795
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Qy 796 SKKETSGSQKSDQKPTGSIKKREKAYKPEGOLVLEEKQGSVPMSVGVYQAAAG 855
Db 916 SSSYSQDISRHHN---STAELQKAEKKEETWKLMEADKQOTGOVKYVWYDKAIGL 972
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Db 1077 SKELDIDVDSMLPEVIAKHMGSLEFNVIGACVILLATPAAIIPPLIGLIV---FFVORFY 1133
Qy 1036 I---RELKRLDNIQSPFLSHITSSIOGLATIHAYNKGQEFRLHRYQELDNDQAPFLFT 1092
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Qy 1093 CAMRWLAVRLDLSIALITTTGMLVLMHGOIPPAYAGLAISAVOLJGLFOFTVRLASE 1152
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QY 1213 VSEPTIKPKERIGIVGTSGKSSIGMALFRLVELSGGCIKIDGVRIISDIGIADLRKLSI 1272
Db 1313 INVTINGGEKVGIVGRTGAGKSSLTGLFRINSABEGEIIIDGINIAKIGLHDLRFKITT 1372
QY 1273 IPOEPVLFSGTVRSNLDPENQYTEDOIMDALERTHMEKCTAOLPLKISEFWMENGDNFSV 1332
Db 1373 IPODPVLFSGSLRMNLDPEFSQSDDEEYWTSLIELAHLKDFVSALPDKLDHECAEGENLSV 1432
QY 1333 GEROLICIAARALRHCKIILIDEATAAMDRETDLLIOETIREAFADCTMLTIAHRLHTVL 1392
Db 1433 GORQLVCLARALRKTKILVLDEATAVADLETDLLIOSTIRTOFEDCTVLTIAHRLNTIM 1492
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Db 1493 DYTTRVIVLDKGEIOEYGAPSDLL-QQRGLEFSM 1524

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GenCore version 4.5
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OM protein - protein search, using sw model

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(without alignments)
2759.690 Million cell updates/sec

Title: US-09-528-031-2

Perfect score: 7308
Sequence: 1 MKDDICKEIIPSGYRSV.....DSSRFYAFMAAEKVAVK 1437

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 3502263 seqs, 351980561 residues

Total number of hits satisfying chosen parameters: 3502263

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Listing first 45 summaries

Database :

Pending Patents_AA_Main:*
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25: /cgn2_6/ptodata/2/paa/US101.COMB.pep:*
26: /cgn2_6/ptodata/2/paa/US60.COMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	7308	100.0	1437	19	US-09-528-031-2
2	7298	99.9	1453	12	US-08-843-459-2
3	7287	99.8	1437	20	US-09-668-628-19
4	7297	99.8	1437	23	US-09-934-421A-6
5	7293	99.8	1437	1	PCT-US99-06644-4
6	4116	56.3	921	21	US-09-760-470-63
7	3037	41.6	1363	21	US-09-775-685-44

8	3016.5	41.3	1356	24	US-10-090-280-33	Sequence 33, Appl
9	3015	41.3	1359	24	US-10-090-280-34	Sequence 34, Appl
10	2916.5	39.9	1332	21	US-09-775-685-50	Sequence 50, Appl
11	2865	39.2	569	21	US-09-760-470-51	Sequence 51, Appl
12	2865	39.2	569	21	US-09-760-483-464	Sequence 464, App
13	2643.5	36.2	1331	20	US-09-668-628-18	Sequence 1, Appl
14	2637	36.1	1379	21	US-09-703-253-18	Sequence 18, Appl
15	2583.5	35.4	1216	21	US-09-775-685-48	Sequence 48, Appl
16	2563.5	35.1	1247	21	US-09-775-685-48	Sequence 48, Appl
17	2540.5	34.8	1360	23	US-09-934-421A-2	Sequence 2, Appl
18	2425	33.2	1077	26	US-60-299-484-36	Sequence 36, Appl
19	2401	32.9	1238	26	US-60-207-558-359	Sequence 359, App
20	2316.5	31.7	1216	21	US-09-703-253-24	Sequence 24, Appl
21	2290	31.3	1063	21	US-09-703-253-6	Sequence 6, Appl
22	2086	28.5	1545	26	US-60-333-700-44	Sequence 44, Appl
23	2086	28.5	1545	26	US-60-333-700-4	Sequence 4, Appl
24	2085	28.5	1545	26	US-60-333-700-24	Sequence 24, Appl
25	2085	28.5	1545	26	US-60-333-700-26	Sequence 26, Appl
26	2085	28.5	1545	26	US-60-333-700-28	Sequence 28, Appl
27	2085	28.5	1545	26	US-60-333-700-30	Sequence 30, Appl
28	2085	28.5	1545	26	US-60-333-700-32	Sequence 32, Appl
29	2085	28.5	1545	26	US-60-333-700-34	Sequence 34, Appl
30	2085	28.5	1545	26	US-60-333-700-40	Sequence 40, Appl
31	2085	28.5	1545	26	US-60-333-700-42	Sequence 42, Appl
32	2085	28.5	1545	26	US-60-333-700-46	Sequence 46, Appl
33	2085	28.5	1545	26	US-60-333-700-48	Sequence 48, Appl
34	2084	28.5	1545	26	US-60-333-700-38	Sequence 38, Appl
35	2082	28.5	1531	8	US-08-460-907A-4	Sequence 4, Appl
36	2082	28.5	1531	8	US-08-461-384A-4	Sequence 4, Appl
37	2082	28.5	1531	8	US-08-461-446A-4	Sequence 4, Appl
38	2082	28.5	1531	8	US-08-461-446B-4	Sequence 4, Appl
39	2082	28.5	1531	8	US-08-461-446C-4	Sequence 4, Appl
40	2082	28.5	1531	8	US-08-463-078A-4	Sequence 4, Appl
41	2082	28.5	1531	8	US-08-463-092A-4	Sequence 4, Appl
42	2082	28.5	1531	8	US-08-333-700-36	Sequence 36, Appl
43	2075	28.4	1531	6	US-08-292-309-8	Sequence 8, Appl
44	2075	28.4	1531	8	US-08-407-207-2	Sequence 2, Appl
45	2075	28.4	1531	8	US-08-460-907A-2	Sequence 2, Appl

ALIGNMENTS

RESULT 1
US-09-528-031-2
; Sequence 2, Application US/09528031
; GENERAL INFORMATION:
; APPLICANT: SHYJAN, Andrew
; TITLE OF INVENTION: NOVEL MULTIDRUG RESISTANCE-ASSOCIATED
; POLYPEPTIDE
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: LAHIVE & COCKFIELD, LLP
; STREET: 28 State Street
; CITY: Boston
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/528,031
; FILING DATE: 17-Mar-2001
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Elizabeth A. Hanley
; REGISTRATION NUMBER: 33,505
; REFERENCE/DOCKET NUMBER: MNI-056CP
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 227-7400

TELEFAX: (617) 742-4214
 INFORMATION FOR SEQ ID NO: 2:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 1437 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 SEQUENCE DESCRIPTION: SEQ ID NO: 2:
 US-09-528-031-2

Query Match 100.0%; Score 7308; DB 19; Length 1437;
 Best Local Similarity 100.0%; Pred. No. 0;
 Matches 1437; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MKDIDGKTYIPSPGRSVRENTSTSGTHRDREDSKFRRTREPCODALETARAGLS 60
 DB 1 MKDIDGKTYIPSPGRSVRENTSTSGTHRDREDSKFRRTREPCODALETARAGLS 60
 QY 61 LDMSMSOLRLDEEHPKGYHHGLSKAPRTTCKQHHPVDNAGLFSCMTFSWLSLAR 120
 DB 61 LDMSMSOLRLDEEHPKGYHHGLSKAPRTTCKQHHPVDNAGLFSCMTFSWLSLAR 120
 QY 121 VAARKGELSMEDVWSLSKSHSSDVNCRRLERLQOEELNEVGPDASLRVWTFCTRLI 180
 DB 121 VAARKGELSMEDVWSLSKSHSSDVNCRRLERLQOEELNEVGPDASLRVWTFCTRLI 180
 QY 181 LSTVCMITQLAGSGPAPVWKHLLEYTOATESNLQYSLLVGLLLETVRSMSLALTW 240
 DB 181 LSTVCMITQLAGSGPAPVWKHLLEYTOATESNLQYSLLVGLLLETVRSMSLALTW 240
 QY 241 AANTRTGVRRLGAILTMAKRLIKLNKEKSLGELINCSNDGOMFEAAVAGSLIAG 300
 DB 241 AANTRTGVRRLGAILTMAKRLIKLNKEKSLGELINCSNDGOMFEAAVAGSLIAG 300
 QY 301 PVVALIGMTYVNIILGPTGLSAVFILFYPAMMFASRLTAFERRCVAATDERVQKME 360
 DB 301 PVVALIGMTYVNIILGPTGLSAVFILFYPAMMFASRLTAFERRCVAATDERVQKME 360
 QY 361 VLTYYIKETKMYAVKAFSGSVOKIREERRILKAGYFQSTIVGAPIVVIASVTFESV 420
 DB 361 VLTYYIKETKMYAVKAFSGSVOKIREERRILKAGYFQSTIVGAPIVVIASVTFESV 420
 QY 421 HMTLGFDLTAQAFTVYVFNFSMTALKVTPSVKSLASAVADRFKSLFMEEVHMTK 480
 DB 421 HMTLGFDLTAQAFTVYVFNFSMTALKVTPSVKSLASAVADRFKSLFMEEVHMTK 480
 QY 481 NKPSAPHIKIEKKNATLAMDSSHSIONSPLTPKMKDKKRSRGGKKEKVRLOLQTEHOA 540
 DB 481 NKPSAPHIKIEKKNATLAMDSSHSIONSPLTPKMKDKKRSRGGKKEKVRLOLQTEHOA 540
 QY 541 VLAEOKGHLLDSDRSPREEEGKHILGRLQRTLHSIDLETQEGKLVGICGSVSG 600
 DB 541 VLAEOKGHLLDSDRSPREEEGKHILGRLQRTLHSIDLETQEGKLVGICGSVSG 600
 QY 601 KTSLSIALIGOMTLEGSIAISGTFAYVAOAMILNATLRNILLFGKYDEBRNYSVNS 660
 DB 601 KTSLSIALIGOMTLEGSIAISGTFAYVAOAMILNATLRNILLFGKYDEBRNYSVNS 660
 QY 661 CCLRPDLAILPSSDLTEIGERGANLISGQORISLARALYDRSYIILDDPLSLDAHV 720
 DB 661 CCLRPDLAILPSSDLTEIGERGANLISGQORISLARALYDRSYIILDDPLSLDAHV 720
 QY 721 NHIFNSAIRKHHSKYTLFTHQOYLVDCEVIFMKEGCTTERGTHEELMNLGDAYTI 780
 DB 721 NHIFNSAIRKHHSKYTLFTHQOYLVDCEVIFMKEGCTTERGTHEELMNLGDAYTI 780
 QY 781 FNNLLGFTPPVEINSKKEKSGOKSODKPKTGSIKKEKAVPREGQVQLEEKQGS 840
 DB 781 FNNLLGFTPPVEINSKKEKSGOKSODKPKTGSIKKEKAVPREGQVQLEEKQGS 840
 QY 841 VPMSVYGVYIQAAGPLAFLVIMALFMLNNGSTAFSTWMLSYNKKOSSGNTTYRGNETS 900
 DB 841 VPMSVYGVYIQAAGPLAFLVIMALFMLNNGSTAFSTWMLSYNKKOSSGNTTYRGNETS 900

DB 841 VPMSVYGVYIQAAGPLAFLVIMALFMLNNGSTAFSTWMLSYNKKOSSGNTTYRGNETS 900
 QY 901 VSDSKNDPNHMOYYASTIALSMAVWLILKAIRGVFVKGTLRASSRLHDELFRRLRSBM 960
 DB 901 VSDSKNDPNHMOYYASTIALSMAVWLILKAIRGVFVKGTLRASSRLHDELFRRLRSBM 960
 QY 961 KEFDTPTGRLINRFSKMDVDVRLPQAMFQONVILVFECYGMILAGVPMFLVAVGP 1020
 DB 961 KEFDTPTGRLINRFSKMDVDVRLPQAMFQONVILVFECYGMILAGVPMFLVAVGP 1020
 QY 1021 LVILFVSLHIVSRVILRELKRLDNITOSPFLSHITSSIOGLATHTAANKGQEFHRYOEL 1080
 DB 1021 LVILFVSLHIVSRVILRELKRLDNITOSPFLSHITSSIOGLATHTAANKGQEFHRYOEL 1080
 QY 1081 LDDQAPFLEFTCMARMLAVRLDLISALTITTTGLMTVLNMGQIPPAVAGIASYAVOLT 1140
 DB 1081 LDDQAPFLEFTCMARMLAVRLDLISALTITTTGLMTVLNMGQIPPAVAGIASYAVOLT 1140
 QY 1141 GLFOFTVRLASEFTARTSVBRINHYTKTSLERPAIKKAPSPMPQGEVTFENAEM 1200
 DB 1141 GLFOFTVRLASEFTARTSVBRINHYTKTSLERPAIKKAPSPMPQGEVTFENAEM 1200
 QY 1201 RYREBNLPVLKVSFTIKPEKIGIVGRTSGKSSIGMALFRLVELSGGCIKIDGVRI 1260
 DB 1201 RYREBNLPVLKVSFTIKPEKIGIVGRTSGKSSIGMALFRLVELSGGCIKIDGVRI 1260
 QY 1261 IGLADLRSKSTIPQEPVLFSGTVRSNLDPEFNOYTEDQIWDALERTHMKBCIAQLPLKE 1320
 DB 1261 IGLADLRSKSTIPQEPVLFSGTVRSNLDPEFNOYTEDQIWDALERTHMKBCIAQLPLKE 1320
 QY 1321 SEVENGDNEFSGEROLLICARALLRHCKILLIDEATAMDPTDILLIQUETREATAOCT 1380
 DB 1321 SEVENGDNEFSGEROLLICARALLRHCKILLIDEATAMDPTDILLIQUETREATAOCT 1380
 QY 1381 MLIARHLHTVLGSDRIWLAQGVVEFDTPSVLSNDSRFYAMFAAENKVAAYG 1437
 DB 1381 MLIARHLHTVLGSDRIWLAQGVVEFDTPSVLSNDSRFYAMFAAENKVAAYG 1437

RESULT 2
 US-08-843-459-2
 ; Sequence 2, Application US/08843459
 ; GENERAL INFORMATION:
 ; APPLICANT: SHYJAN, Andrew
 ; TITLE OF INVENTION: NOVEL MULTIDRUG RESISTANCE-ASSOCIATED
 ; TITLE OF INVENTION: POLYPEPTIDE
 ; NUMBER OF SEQUENCES: 8
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Testa, Hurwitz & Thibault
 ; STREET: 125 High St.
 ; CITY: Boston
 ; STATE: MA
 ; COUNTRY: USA
 ; ZIP: 02110
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: PatentIn Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/843,459
 ; FILING DATE:
 ; CLASSIFICATION: 514
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: PENTON, Gillian M
 ; REGISTRATION NUMBER: 36,508
 ; REFERENCE/DOCKET NUMBER: MIL-001
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (617) 248-7000
 ; TELEFAX: (617) 248-7100
 ; INFORMATION FOR SEQ. ID NO: 2:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 1453 amino acids

TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-843-459-2

Query Match 99.9%; Score 7298; DB 12; Length 1453;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 1456; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY	1	MKIDIDKEIYIPSPGRSVREKSTSTGTHDRDESKFRRTREPLECODALETAARAGLS	60
DB	17	MKIDIDKEIYIPSPGRSVREKSTSTGTHDRDESKFRRTREPLECODALETAARAGLS	76
QY	61	LDASMSQRLILDEHPKGYHNGLSALKPRTTCKHQPVDNAGLFCSCMFFSMLSLAR	120
DB	77	LDASMSQRLILDEHPKGYHNGLSALKPRTTCKHQPVDNAGLFCSCMFFSMLSLAR	136
QY	121	VAHKGELSMEDVWSLSKHSSDVNCRRLERLMOEELNEVGPDPAASLRVYVIFCRRRLI	180
DB	137	VAHKGELSMEDVWSLSKHSSDVNCRRLERLMOEELNEVGPDPAASLRVYVIFCRRRLI	196
QY	181	LSIVCLMITQLAGSGPAFWKHLLEYTQATESMLQYSLLVGLLLEIVRSMSLALTW	240
DB	197	LSIVCLMITQLAGSGPAFWKHLLEYTQATESMLQYSLLVGLLLEIVRSMSLALTW	256
QY	241	ALVYPRGVRIRGAILTPMAFKKILIKRIKIKESIGELINISNCGQRFEEAAVAGSLLAG	300
DB	257	ALVYPRGVRIRGAILTPMAFKKILIKRIKIKESIGELINISNCGQRFEEAAVAGSLLAG	316
QY	301	PVVAIIIGMIVNVIILGPTGLGSAVFLEFPAMMFASRLTAFFRRKCVAAATDERVOKNE	360
DB	317	PVVAIIIGMIVNVIILGPTGLGSAVFLEFPAMMFASRLTAFFRRKCVAAATDERVOKNE	376
QY	361	VLTYYIKFYKMYAVKAFSGVQKIREEBRILEKAGYFQGITVGVADIVVAVSVTFESV	420
DB	377	VLTYYIKFYKMYAVKAFSGVQKIREEBRILEKAGYFQGITVGVADIVVAVSVTFESV	436
QY	421	HMTLGFDTLPAOAFVTVTVNSMTFALKTPFYVSKLSSEASVAVDRKSLFMEVEMIK	480
DB	437	HMTLGFDTLPAOAFVTVTVNSMTFALKTPFYVSKLSSEASVAVDRKSLFMEVEMIK	496
QY	481	NKPASPHIKIEMKNATLAMDSSSHSSIONSPLTPPKMKKDRASRGKKEKROLORTEHOA	540
DB	497	NKPASPHIKIEMKNATLAMDSSSHSSIONSPLTPPKMKKDRASRGKKEKROLORTEHOA	556
QY	541	VLAEGKGHLILDSDESPPEEKGKTHLGHRLQRTLSIDLETIQEGKLVGICGSVSG	600
DB	557	VLAEGKGHLILDSDESPPEEKGKTHLGHRLQRTLSIDLETIQEGKLVGICGSVSG	616
QY	601	KTSLSIAIIGOMTLLEGSTAIISGTFAYVAQOAMTLNATLDNLIIFGKEYDEBERNSVLNS	660
DB	617	KTSLSIAIIGOMTLLEGSTAIISGTFAYVAQOAMTLNATLDNLIIFGKEYDEBERNSVLNS	676
QY	661	CCLRPLALIPSSDLTEIGERGAMLSGGQRQRTSIARALXSDRSIYLLDPLSLADAHG	720
DB	677	CCLRPLALIPSSDLTEIGERGAMLSGGQRQRTSIARALXSDRSIYLLDPLSLADAHG	736
QY	721	NHIFNSAIRKHKLSKTVLEVTQOLQYLVDCEVIFMKEGCITERTGTHEELMNLNGDYATI	780
DB	737	NHIFNSAIRKHKLSKTVLEVTQOLQYLVDCEVIFMKEGCITERTGTHEELMNLNGDYATI	796
QY	781	FNNLLGEPPEVINSKKEKESGQKSSQDGPRTGSIKKRKAAYKPEEGOLVOLEEKQGS	840
DB	797	FNNLLGEPPEVINSKKEKESGQKSSQDGPRTGSIKKRKAAYKPEEGOLVOLEEKQGS	856
QY	841	VPMVSVGVYIOAAGCPLEAFVIALFMFLANGSTAFSTMVLSYMKOSGNTTYTRGNETS	900
DB	857	VPMVSVGVYIOAAGCPLEAFVIALFMFLANGSTAFSTMVLSYMKOSGNTTYTRGNETS	916
QY	901	VSDSMKDNPMOYIYASTIALSMAVMLILKAIKRVGVVYKGLTRASSRLHDELFRRLILSPM	960
DB	917	VSDSMKDNPMOYIYASTIALSMAVMLILKAIKRVGVVYKGLTRASSRLHDELFRRLILSPM	976

QY	961	KFPDTPPGRIILNRFESKMDDEVDRLPPOAEMFIONVILVEFCVGMIGVPMFLVAVGP	1020
DB	977	KFPDTPPGRIILNRFESKMDDEVDRLPPOAEMFIONVILVEFCVGMIGVPMFLVAVGP	1036
QY	1021	LVILFVSLHIVSRVILRELKRLDNITOSPFLSHITSSIOGLATTHAVNKGQEFLLHRYQEL	1080
DB	1037	LVILFVSLHIVSRVILRELKRLDNITOSPFLSHITSSIOGLATTHAVNKGQEFLLHRYQEL	1096
QY	1081	LDNQAPPEFLTCAMRWLAVALDLISTALITTTGIMTYLMHGOIPRAYAGIAISAVOLT	1140
DB	1097	LDNQAPPEFLTCAMRWLAVALDLISTALITTTGIMTYLMHGOIPRAYAGIAISAVOLT	1156
QY	1141	GLFOFVRLASEPBARFVSRIINHYIKTSLSEAPARIKKNAPSPDMPQBEQVFNEMEM	1200
DB	1157	GLFOFVRLASEPBARFVSRIINHYIKTSLSEAPARIKKNAPSPDMPQBEQVFNEMEM	1216
QY	1201	RYRENPLVLRKVSFTIKPKKIGIVGTGSGKSLGMAFLRVELSGGCIRIDGVRTSD	1260
DB	1217	RYRENPLVLRKVSFTIKPKKIGIVGTGSGKSLGMAFLRVELSGGCIRIDGVRTSD	1276
QY	1261	IGLADLRKSLIIPQEPVLSGTVRSNLDPPNQTTEQOIMDALERTHMKECIQAOLPLKLE	1320
DB	1277	IGLADLRKSLIIPQEPVLSGTVRSNLDPPNQTTEQOIMDALERTHMKECIQAOLPLKLE	1336
QY	1321	SEVMENGDNPVGEROLCTARALLRHCKILILDEATRAMTEPDLIOETIREAFADCT	1380
DB	1337	SEVMENGDNPVGEROLCTARALLRHCKILILDEATRAMTEPDLIOETIREAFADCT	1396
QY	1381	MLTIAHRLHIVLGSDRIMVLAQGVVERDPVSVLSNDSRFYAMFAAEKKAHVAVKG	1437
DB	1397	MLTIAHRLHIVLGSDRIMVLAQGVVERDPVSVLSNDSRFYAMFAAEKKAHVAVKG	1453

RESULT 3
US-09-668-628-19
Sequence 19, Application us/09668628
GENERAL INFORMATION:
APPLICANT: Krasnow, Randi E.
APPLICANT: Baughn, Mariah R.
TITLE OF INVENTION: ATP-BINDING CASSETTE PROTEIN
FILE REFERENCE: PC-0021 US
CURRENT APPLICATION NUMBER: us/09/668,628
NUMBER OF SEQ ID NOS: 19
SOFTWARE: PERL Program
SEQ ID NO 19
LENGTH: 1437
TYPE: PRP
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: misc.feature
OTHER INFORMATION: Incyte ID No: g5605864
US-09-668-628-19

Query Match	99.8%;	Score 7297;	DB 20;	Length 1437;
Best Local Similarity	99.9%;	Pred. No. 0;		
Matches 1435;	Conservative 1;	Mismatches 1;	Indels 0;	Gaps 0;
QY	1	MKIDIDKEIYIPSPGRSVREKSTSTGTHDRDESKFRRTREPLECODALETAARAGLS	60	
DB	1	MKIDIDKEIYIPSPGRSVREKSTSTGTHDRDESKFRRTREPLECODALETAARAGLS	60	
QY	61	LDASMSQRLILDEHPKGYHNGLSALKPRTTCKHQPVDNAGLFCSCMFFSMLSLAR	120	
DB	61	LDASMSQRLILDEHPKGYHNGLSALKPRTTCKHQPVDNAGLFCSCMFFSMLSLAR	120	
QY	121	VAHKGELSMEDVWSLSKHSSDVNCRRLERLMOEELNEVGPDPAASLRVYVIFCRRRLI	180	
DB	121	VAHKGELSMEDVWSLSKHSSDVNCRRLERLMOEELNEVGPDPAASLRVYVIFCRRRLI	180	
QY	181	LSIVCLMITQLAGSGPAFWKHLLEYTQATESMLQYSLLVGLLLEIVRSMSLALTW	240	

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181 LSIIVCMITQLAGFSGPAPVWKHLLEYTOATESNLQYSLLVGLLLEIVRSMSLALTW
240
241 ALNRYTGVRLRGAILTMAFKKILTKNIKEKISGELINICSDGOMFEPAANGSLLAG
300
241 ALNRYTGVRLRGAILTMAFKKILTKNIKEKISGELINICSDGOMFEPAANGSLLAG
300
301 PVVAILGMIYNYIIIGPTGFLGSAVFILFYPAAMFASRLTAYFRRCVATDERVOKNE
360
301 PVVAILGMIYNYIIIGPTGFLGSAVFILFYPAAMFASRLTAYFRRCVATDERVOKNE
360
361 VLTITKFTKMYAMVAFKFSQVOKIREERRILEKAGYFOSITGVAPIVVIVASVTFV
420
361 VLTITKFTKMYAMVAFKFSQVOKIREERRILEKAGYFOSITGVAPIVVIVASVTFV
420
421 HMTLGFDLTAQAQFTVYVFNMTFALKVTPSVKSLSEASAVADRFKSLFLEEVHMK
480
421 HMTLGFDLTAQAQFTVYVFNMTFALKVTPSVKSLSEASAVADRFKSLFLEEVHMK
480
481 NKPSAPHIKIEKNATLAMDSSHSIIONSPKLTPEKMKDKRASRGKEKVRLOLTERHOA
540
481 NKPSAPHIKIEKNATLAMDSSHSIIONSPKLTPEKMKDKRASRGKEKVRLOLTERHOA
540
541 VLABOKGHLLDSDERPEPEEKGKIHGLRLQRTLSIDLEIOEGKLVGICGSVSG
600
541 VLABOKGHLLDSDERPEPEEKGKIHGLRLQRTLSIDLEIOEGKLVGICGSVSG
600
601 KTSLSAIIIGOMTLEGSAISGTFAVYAOAMILNATRLDNLFEKEDDEEYNSVLNS
660
601 KTSLSAIIIGOMTLEGSAISGTFAVYAOAMILNATRLDNLFEKEDDEEYNSVLNS
660
661 CCLRPDLALPSSDLTEIGERGANSLSGORISLARALYSRSTIYIILDDPLSALDAHG
720
661 CCLRPDLALPSSDLTEIGERGANSLSGORISLARALYSRSTIYIILDDPLSALDAHG
720
721 NHIEVSAIRKHUKSTVLFVTHOLOLVDCDEVIFMKEGCTERTGTHEELMNLNGDYAT
780
721 NHIEVSAIRKHUKSTVLFVTHOLOLVDCDEVIFMKEGCTERTGTHEELMNLNGDYAT
780
781 FNNLLGETPPEINSKETSQKKSODKGPKTGSIKKERKVKPEGOLOLEEGQSS
840
781 FNNLLGETPPEINSKETSQKKSODKGPKTGSIKKERKVKPEGOLOLEEGQSS
840
781 FNNLLGETPPEINSKETSQKKSODKGPKTGSIKKERKVKPEGOLOLEEGQSS
840
841 VPMVSYGYVIOAAGPLAFVLVLMALFNLVNGSTAFSTWMLSYWIKOGSNTVTGNETS
900
841 VPMVSYGYVIOAAGPLAFVLVLMALFNLVNGSTAFSTWMLSYWIKOGSNTVTGNETS
900
901 VSDSKDNPDMOYAYASIALSMAVMLIKALRGVVFVKGTLRASSRLHDELFRILLRSPM
960
901 VSDSKDNPDMOYAYASIALSMAVMLIKALRGVVFVKGTLRASSRLHDELFRILLRSPM
960
961 KFFDTPPTGRILNRSKMDVDVRLPROAEMFIONVILVFCVGMIAGVFPWFLVAVGP
1020
961 KFFDTPPTGRILNRSKMDVDVRLPROAEMFIONVILVFCVGMIAGVFPWFLVAVGP
1020
1021 LVILFVSLHIVSRVILRELKRLDNTQSPFLSHITSSIOGLATIHAYNKGOFELRYOEL
1080
1021 LVILFVSLHIVSRVILRELKRLDNTQSPFLSHITSSIOGLATIHAYNKGOFELRYOEL
1080
1081 LDDNOAPFELTCAMRWLAVALDLISALITTTGLMIVLMHQIIPPAYAGLAISYAVOLT
1140
1081 LDDNOAPFELTCAMRWLAVALDLISALITTTGLMIVLMHQIIPPAYAGLAISYAVOLT
1140
1141 GLPQFTYRLASSETARFVSERINHYITLSLEAPARIKKNAPSDMWQEGEVTERENAM
1200
1141 GLPQFTYRLASSETARFVSERINHYITLSLEAPARIKKNAPSDMWQEGEVTERENAM
1200
1201 RYRENLDVLVKKVFFTIKPKKIGIVGTGSGKSSIGMALRLVLESGCCIKIDVVRISD
1260
1201 RYRENLDVLVKKVFFTIKPKKIGIVGTGSGKSSIGMALRLVLESGCCIKIDVVRISD
1260
1261 IGLADLRSKLSIIPOEVLFSGTVRSNLDPEFNOYTEQIMDALEERTHKECIAQLPLE
1320
1261 IGLADLRSKLSIIPOEVLFSGTVRSNLDPEFNOYTEQIMDALEERTHKECIAQLPLE
1320

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1261 IGLADLRSKLSIIPOEVLFSGTVRSNLDPEFNOYTEQIMDALEERTHKECIAQLPLE
1320
1321 SEVWENDNFVSGEROLLCTARALLRCKILLIDEATAAMDDETDLIIQETIREAFADCT
1380
1321 SEVWENDNFVSGEROLLCTARALLRCKILLIDEATAAMDDETDLIIQETIREAFADCT
1380
1381 MLTIARLHRTVLGSDRLMVAOGVVEFDPFVSLLSDSSRFYAMFPAANAKVAVKG
1437
1381 MLTIARLHRTVLGSDRLMVAOGVVEFDPFVSLLSDSSRFYAMFPAANAKVAVKG
1437
RESULT 4
US-09-934-421A-6
; Sequence 6: Application US/09934421A
; GENERAL INFORMATION:
; APPLICANT: Curtiss, Roy A. J.
; TITLE OF INVENTION: 44589, A NOVEL HUMAN ABC TRANSPORTER
; TITLE OF INVENTION: FAMILY MEMBER AND USES THEREOF
; FILE REFERENCE: 10448-083001
; CURRENT APPLICATION NUMBER: US/09/934,421A
; CURRENT FILING DATE: 2001-08-21
; PRIOR APPLICATION NUMBER: 60/226,770
; PRIOR FILING DATE: 2000-08-21
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 1437
; TYPE: PRN
; ORGANISM: Homo sapiens
US-09-934-421A-6

Query Match 99.8%; Score 7297; DB 23; Length 1437;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 1435; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

1 MKDIDIGKEYIIPSPGRSVRERTSGTHRODESKFRTTRPLECODALETAAREGIS
60
1 MKDIDIGKEYIIPSPGRSVRERTSGTHRODESKFRTTRPLECODALETAAREGIS
60
61 LDASHMSQRLIDEHPKRYHNGLSALKPIRTTCKHQHPVDNAGLFSQMTFSWLSLAR
120
61 LDASHMSQRLIDEHPKRYHNGLSALKPIRTTCKHQHPVDNAGLFSQMTFSWLSLAR
120
121 VAHKGELSMEVWSISKHSSDVNCRLERLMOEFLNEVGPDAASLRVWVIFCRTL
180
121 VAHKGELSMEVWSISKHSSDVNCRLERLMOEFLNEVGPDAASLRVWVIFCRTL
180
181 LSIIVCMITQLAGFSGPAPVWKHLLEYTOATESNLQYSLLVGLLLEIVRSMSLALTW
240
181 LSIIVCMITQLAGFSGPAPVWKHLLEYTOATESNLQYSLLVGLLLEIVRSMSLALTW
240
241 ALNRYTGVRLRGAILTMAFKKILTKNIKEKISGELINICSDGOMFEPAANGSLLAG
300
241 ALNRYTGVRLRGAILTMAFKKILTKNIKEKISGELINICSDGOMFEPAANGSLLAG
300
301 PVVAILGMIYNYIIIGPTGFLGSAVFILFYPAAMFASRLTAYFRRCVATDERVOKNE
360
301 PVVAILGMIYNYIIIGPTGFLGSAVFILFYPAAMFASRLTAYFRRCVATDERVOKNE
360
361 VLTITKFTKMYAMVAFKFSQVOKIREERRILEKAGYFOSITGVAPIVVIVASVTFV
420
361 VLTITKFTKMYAMVAFKFSQVOKIREERRILEKAGYFOSITGVAPIVVIVASVTFV
420
421 HMTLGFDLTAQAQFTVYVFNMTFALKVTPSVKSLSEASAVADRFKSLFLEEVHMK
480
421 HMTLGFDLTAQAQFTVYVFNMTFALKVTPSVKSLSEASAVADRFKSLFLEEVHMK
480
481 NKPSAPHIKIEKNATLAMDSSHSIIONSPKLTPEKMKDKRASRGKEKVRLOLTERHOA
540
481 NKPSAPHIKIEKNATLAMDSSHSIIONSPKLTPEKMKDKRASRGKEKVRLOLTERHOA
540
541 VLABOKGHLLDSDERPEPEEKGKIHGLRLQRTLSIDLEIOEGKLVGICGSVSG
600
541 VLABOKGHLLDSDERPEPEEKGKIHGLRLQRTLSIDLEIOEGKLVGICGSVSG
600

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Db 541 VLAEOKGHLLDSDRSPPEEEKGHIHGLRLQRTLHSIDLEIOEGKLVGICGSVSG 600
Qy 601 KTSLSIALGOMTLLEGSAISGTFAYVAQOAMILNATLRDNLFGKEYDERYSVLNS 660
Db 601 KTSLSIALGOMTLLEGSAISGTFAYVAQOAMILNATLRDNLFGKEYDERYSVLNS 660
Qy 661 CCLRPDLALPSSDLTEIGERGANLGGORORISLARALYSRSYIILDDPLSALDAHVG 720
Db 661 CCLRPDLALPSSDLTEIGERGANLGGORORISLARALYSRSYIILDDPLSALDAHVG 720
Qy 721 NHIFNSAIRKHLKSKTVLFTVTHQLOYLVDCDEVIFMKEGCTIERGTHEELMNLNGDYATI 780
Db 721 NHIFNSAIRKHLKSKTVLFTVTHQLOYLVDCDEVIFMKEGCTIERGTHEELMNLNGDYATI 780
Qy 781 FNNLLGTPPEVINSKETSOGSKSODKGPRTGSIKKEKAVKPEEGOLVLEKGGS 840
Db 781 FNNLLGTPPEVINSKETSOGSKSODKGPRTGSIKKEKAVKPEEGOLVLEKGGS 840
Qy 841 VPMSYGYVIOAGGPLAFVIMLFMLNVSSTAFSTMWLSYWKOGSGNTTVTRGNETS 900
Db 841 VPMSYGYVIOAGGPLAFVIMLFMLNVSSTAFSTMWLSYWKOGSGNTTVTRGNETS 900
Qy 901 VSDSKNDPNMOYASIALMAVWLILKAIKGVVFKGTLRASSRLDELFRILRSPM 960
Db 901 VSDSKNDPNMOYASIALMAVWLILKAIKGVVFKGTLRASSRLDELFRILRSPM 960
Qy 961 KEFTTTPGRLNFRSKMDEVDRLPQOAEFIONVILVFCVGMIAVCPMELVAVGP 1020
Db 961 KEFTTTPGRLNFRSKMDEVDRLPQOAEFIONVILVFCVGMIAVCPMELVAVGP 1020
Qy 1021 LVILFSVLHYSRVLIRELRLDNTOSPLSHITSIOGLATIHAYKKGOFELHAYOL 1080
Db 1021 LVILFSVLHYSRVLIRELRLDNTOSPLSHITSIOGLATIHAYKKGOFELHAYOL 1080
Qy 1081 LDDNOAPEFLFTCAMRWLAVERLDLISALITTTGLMIVLMHQIPPAAGLAISVAVOLT 1140
Db 1081 LDDNOAPEFLFTCAMRWLAVERLDLISALITTTGLMIVLMHQIPPAAGLAISVAVOLT 1140
Qy 1141 GLPFTYRLASETARFTSVSRINHYITLSEAPARKKAPSDWQOEGVTFRENAEM 1200
Db 1141 GLPFTYRLASETARFTSVSRINHYITLSEAPARKKAPSDWQOEGVTFRENAEM 1200
Qy 1201 RYRENLPVLTKKVSFTIKPKKIGIVGRSGKSSIGMALPFLVLSGGCIKIDSVRISD 1260
Db 1201 RYRENLPVLTKKVSFTIKPKKIGIVGRSGKSSIGMALPFLVLSGGCIKIDSVRISD 1260
Qy 1261 IGLADLRKSLIIPQEPVLFSGTVRSNLDPNQYTEDQIMDALERTHMKECIAQLPKLE 1320
Db 1261 IGLADLRKSLIIPQEPVLFSGTVRSNLDPNQYTEDQIMDALERTHMKECIAQLPKLE 1320
Qy 1321 SEVENNDNFVGEROLLCTIRALLRHCKIILDEBATAAMOTEDULLOETIREAFADCT 1380
Db 1321 SEVENNDNFVGEROLLCTIRALLRHCKIILDEBATAAMOTEDULLOETIREAFADCT 1380
Qy 1381 MLTIAHLRLHTVLSGDRIMVLAOGOVVERDPVSILSNDSPRYAMEAANKVAVAKG 1437
Db 1381 MLTIAHLRLHTVLSGDRIMVLAOGOVVERDPVSILSNDSPRYAMEAANKVAVAKG 1437

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RESULT 5
PCT-US99-06644-4
; Sequence 4, Application PC/TUS9906644
; GENERAL INFORMATION:
; APPLICANT: Fox Chase Cancer Center
; APPLICANT: Krulh, Gary D.
; APPLICANT: Lee, Kun
; APPLICANT: Belinsky, Martin G.
; APPLICANT: Bain, Lisa J.
; TITLE OF INVENTION: MRP-Related ABC Transporter Encoding
; TITLE OF INVENTION: Nucleic Acids and Methods of Use Thereof
; FILE REFERENCE: FCCC 98-02
; CURRENT APPLICATION NUMBER: PCT/US99/06644

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; CURRENT FILING DATE: 1999-03-26
; EARLIER APPLICATION NUMBER: 60/079,759
; EARLIER FILING DATE: 1998-03-27
; EARLIER APPLICATION NUMBER: 60/095,153
; EARLIER FILING DATE: 1998-08-03
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO: 4
; LENGTH: 1437
; TYPE: PRT
; ORGANISM: Homo sapiens
; PCT-US99-06644-4

Query Match 99.8%; Score 7293; DB 1; Length 1437;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 1434; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 1 MKDIDIGKEYIIPSPGYRVSRETSSTGTHRDREDSKFRRTPLRLECODALETAARAEGS 60
Db 1 MKDIDIGKEYIIPSPGYRVSRETSSTGTHRDREDSKFRRTPLRLECODALETAARAEGS 60
Qy 61 IDASHMSQRLIDEEHPKGYHHGLSALKPIRTCTKHQHPVDNAGLFSCTFSWLSLAR 120
Db 61 IDASHMSQRLIDEEHPKGYHHGLSALKPIRTCTKHQHPVDNAGLFSCTFSWLSLAR 120
Qy 121 VAHKGELSMEDVWSLSKHESSDVNCRRLERLMOEELNVEYGDAA SLRYYWIFCETRLI 180
Db 121 VAHKGELSMEDVWSLSKHESSDVNCRRLERLMOEELNVEYGDAA SLRYYWIFCETRLI 180
Qy 181 ISTVCLMTIQLAGFSGPAPMVHLELYQATESNLQYSLVLVGLLTETIVSMSLATM 240
Db 181 ISTVCLMTIQLAGFSGPAPMVHLELYQATESNLQYSLVLVGLLTETIVSMSLATM 240
Qy 241 ALNRYTGVRLGAILTMAFKILKLNKESLGLINICSDGOMFEPAAVGSLLAG 300
Db 241 ALNRYTGVRLGAILTMAFKILKLNKESLGLINICSDGOMFEPAAVGSLLAG 300
Qy 301 PVVAILGMAYNIILGPTGFLGSANVILFYPAMPFASRLTAYFRRCVCAATDERYOKME 360
Db 301 PVVAILGMAYNIILGPTGFLGSANVILFYPAMPFASRLTAYFRRCVCAATDERYOKME 360
Qy 361 VTYTKFKTMVAVKAFSOSVOKIRREERRIIEKGYFOSIVGVAPYVVIVASVYTFV 420
Db 361 VTYTKFKTMVAVKAFSOSVOKIRREERRIIEKGYFOSIVGVAPYVVIVASVYTFV 420
Qy 421 HMTLGFDLTAAQAFVTVVFNSTPALKVTPSVKSLSEASVAVDRFKSLFLMEEVHMK 480
Db 421 HMTLGFDLTAAQAFVTVVFNSTPALKVTPSVKSLSEASVAVDRFKSLFLMEEVHMK 480
Qy 481 NKPAHPHIKIEKKNATLAMDSSHSIIONSPKILTPMKKKRKRASRGKKEVROLQRTHEHA 540
Db 481 NKPAHPHIKIEKKNATLAMDSSHSIIONSPKILTPMKKKRKRASRGKKEVROLQRTHEHA 540
Qy 541 VLAEOKGHLLDSDRSPPEEEKGHIHGLRLQRTLHSIDLEIOEGKLVGICGSVSG 600
Db 541 VLAEOKGHLLDSDRSPPEEEKGHIHGLRLQRTLHSIDLEIOEGKLVGICGSVSG 600
Qy 601 KTSLSIALGOMTLLEGSAISGTFAYVAQOAMILNATLRDNLFGKEYDERYSVLNS 660
Db 601 KTSLSIALGOMTLLEGSAISGTFAYVAQOAMILNATLRDNLFGKEYDERYSVLNS 660
Qy 661 CCLRPDLALPSSDLTEIGERGANLGGORORISLARALYSRSYIILDDPLSALDAHVG 720
Db 661 CCLRPDLALPSSDLTEIGERGANLGGORORISLARALYSRSYIILDDPLSALDAHVG 720
Qy 721 NHIFNSAIRKHLKSKTVLFTVTHQLOYLVDCDEVIFMKEGCTIERGTHEELMNLNGDYATI 780
Db 721 NHIFNSAIRKHLKSKTVLFTVTHQLOYLVDCDEVIFMKEGCTIERGTHEELMNLNGDYATI 780
Qy 781 FNNLLGTPPEVINSKETSOGSKSODKGPRTGSIKKEKAVKPEEGOLVLEKGGS 840
Db 781 FNNLLGTPPEVINSKETSOGSKSODKGPRTGSIKKEKAVKPEEGOLVLEKGGS 840

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QY 841 VPMVSYGVYIQAGGFLATLVLMALFMLNVGSTARSTWMLSTWIKSGSNTTVTRGNETS 900
DB 841 VPMVSYGVYIQAGGFLATLVLMALFMLNVGSTARSTWMLSTWIKSGSNTTVTRGNETS 900
QY 901 VDSKMDNPHMQYVYASIVYALSMVWMLLKAIKGVYFVKGTLRASSRLHDELFRILRSRM 960
DB 901 VDSKMDNPHMQYVYASIVYALSMVWMLLKAIKGVYFVKGTLRASSRLHDELFRILRSRM 960
QY 961 KFFDTPPGRIILNRSKMDDEVYVRLPFOAEMFIQNVILVFCVGMIAGVFWFPLVAVGP 1020
DB 961 KFFDTPPGRIILNRSKMDDEVYVRLPFOAEMFIQNVILVFCVGMIAGVFWFPLVAVGP 1020
QY 1021 LVYLSVLAIVSRVILRELKRDNTIQSPFLSHITSSIOGLATTHAANKGOEFLHRYOEL 1080
DB 1021 LVYLSVLAIVSRVILRELKRDNTIQSPFLSHITSSIOGLATTHAANKGOEFLHRYOEL 1080
QY 1081 LDDNAPFPLFTCAMRWLAVALDLISALITTTGMLIVLMHGOIPPAVAGLAISYAVOLT 1140
DB 1081 LDDNAPFPLFTCAMRWLAVALDLISALITTTGMLIVLMHGOIPPAVAGLAISYAVOLT 1140
QY 1141 GLFOFTVRLASETEARFSTVERINHYIKTSLSEAPARIKNAKPSDMPQEGEYTFENAM 1200
DB 1141 GLFOFTVRLASETEARFSTVERINHYIKTSLSEAPARIKNAKPSDMPQEGEYTFENAM 1200
QY 1201 RRREMLPLVAKVSTIKPKKIGIVGRTSGKSSLGMAFLRVLVEISGCCIKIDGVRI 1260
DB 1201 RRREMLPLVAKVSTIKPKKIGIVGRTSGKSSLGMAFLRVLVEISGCCIKIDGVRI 1260
QY 1261 IGLADLRSLKLTIPQEPVLFSGTVRSNLDPEFNOYTEDQIWDALERHMECTIAQLPLKLE 1320
DB 1261 IGLADLRSLKLTIPQEPVLFSGTVRSNLDPEFNOYTEDQIWDALERHMECTIAQLPLKLE 1320
QY 1321 SEVMENGNFVSGERQLCIARALLRHCKILLDEATAAMDTEYDILLQETIREAFADCT 1380
DB 1321 SEVMENGNFVSGERQLCIARALLRHCKILLDEATAAMDTEYDILLQETIREAFADCT 1380
QY 1381 MTTIHRHTTVLGSRIWLAOGVVEEDTSPVLLSNDSSRFYAMFAAENKVAVG 1437
DB 1381 MTTIHRHTTVLGSRIWLAOGVVEEDTSPVLLSNDSSRFYAMFAAENKVAVG 1437

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RESULT 6
US-09-760-470-63
; Sequence 63, Application US/09760470
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
; FILE REFERENCE: PT239
; CURRENT APPLICATION NUMBER: US/09/760,470
; PRIOR FILING DATE: 2001-01-16
; PRIOR APPLICATION data removed - consult PALM or file wrapper
; NUMBER OF SEQ ID NOS: 89
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO: 63
; LENGTH: 921
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-760-470-63

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Query Match 56.3%; Score 4116; DB 21; Length 921;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 807; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 613 TLLESISISGTFAYVAAQAMTLNATLNILFGEKYEDEERNYSYNSCCLRDLAIDPS 672
DB 5 TLLESISISGTFAYVAAQAMTLNATLNILFGEKYEDEERNYSYNSCCLRDLAIDPS 64
QY 673 SDLTEIGERGANLGGGGRORISLARALYSDRSIYIILDDPLSALDAHVGNHIFNSAIRKHL 732
DB 65 SDLTEIGERGANLGGGGRORISLARALYSDRSIYIILDDPLSALDAHVGNHIFNSAIRKHL 124

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QY 733 KSKTVLFVTHOLOYLVDCEVITPMKEGCTITERGTHEMLNLDYATIFNNLLGTEPPV 792
DB 125 KSKTVLFVTHOLOYLVDCEVITPMKEGCTITERGTHEMLNLDYATIFNNLLGTEPPV 184
QY 793 EINSKKTSGSOKKSDOKGPKTSGIKKEKAVKREEOQLVOLJEKGGGSVPMVSYGVYIQ 852
DB 185 EINSKKTSGSOKKSDOKGPKTSGIKKEKAVKREEOQLVOLJEKGGGSVPMVSYGVYIQ 244
QY 853 AGGPLAFVLMALFMLNVGSTARSTWMLSTWIKSGSNTTVTRGNETSVDSKMDNPHMQ 912
DB 245 AGGPLAFVLMALFMLNVGSTARSTWMLSTWIKSGSNTTVTRGNETSVDSKMDNPHMQ 304
QY 913 YVASIALSMAVWMLLKAIKGVYFVKGTLRASSRLHDELFRILRSRPMKFFDTPPGRI 972
DB 305 YVASIALSMAVWMLLKAIKGVYFVKGTLRASSRLHDELFRILRSRPMKFFDTPPGRI 364
QY 973 NRSKMDDEVYVRLPFOAEMFIQNVILVFCVGMIAGVFWFPLVAVGPVLVLSVLAIVS 1032
DB 365 NRSKMDDEVYVRLPFOAEMFIQNVILVFCVGMIAGVFWFPLVAVGPVLVLSVLAIVS 424
QY 1033 RVLRELKRDNTIQSPFLSHITSSIOGLATTHAANKGOEFLHRYOELDDNAPFPLFT 1092
DB 425 RVLRELKRDNTIQSPFLSHITSSIOGLATTHAANKGOEFLHRYOELDDNAPFPLFT 484
QY 1093 CAMRWLAVALDLISALITTTGMLIVLMHGOIPPAVAGLAISYAVOLTGLFOFTVRLASE 1152
DB 485 CAMRWLAVALDLISALITTTGMLIVLMHGOIPPAVAGLAISYAVOLTGLFOFTVRLASE 544
QY 1153 TEARFTSVERINHYIKTSLSEAPARIKNAKPSDMPQEGEYTFENAMRRREMLPLVAKK 1212
DB 545 TEARFTSVERINHYIKTSLSEAPARIKNAKPSDMPQEGEYTFENAMRRREMLPLVAKK 604
QY 1213 VSFTIKPKKIGIVGRTSGKSSLGMAFLRVLVEISGCCIKIDGVRI 1272
DB 605 VSFTIKPKKIGIVGRTSGKSSLGMAFLRVLVEISGCCIKIDGVRI 664
QY 1273 IPOEPVLFSGTVRSNLDPEFNOYTEDQIWDALERHMECTIAQLPLLESSEVMENGNFVS 1332
DB 665 IPOEPVLFSGTVRSNLDPEFNOYTEDQIWDALERHMECTIAQLPLLESSEVMENGNFVS 724
QY 1333 GERQLCIARALLRHCKILLDEATAAMDTEYDILLQETIREAFADCTMLTIHRHTTVL 1392
DB 725 GERQLCIARALLRHCKILLDEATAAMDTEYDILLQETIREAFADCTMLTIHRHTTVL 784
QY 1393 GSDRIWLAOGVVEEDTSPVLLSNDSS 1420
DB 785 GSDRIWLAOGVVEEDTSPVLLSNDSS 812

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RESULT 7
US-09-775-685-44
; Sequence 44, Application US/09775685
; GENERAL INFORMATION:
; APPLICANT: Turner, C. Alexander Jr.
; APPLICANT: Mathur, Brian
; APPLICANT: Wang, Xiomeng
; APPLICANT: Abuin, Alejandro
; APPLICANT: Friedrich, Glenn
; APPLICANT: Zambrowicz, Brian
; APPLICANT: Sands, Arthur T.
; APPLICANT: Donoho, Gregory
; TITLE OF INVENTION: Novel Human Transporter Proteins and Polynucleotides Encoding
; FILE REFERENCE: Lex-0128-USA
; CURRENT APPLICATION NUMBER: US/09/775,685
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,973
; PRIOR FILING DATE: 2000-02-03
; PRIOR APPLICATION NUMBER: US 60/182,422
; PRIOR FILING DATE: 2000-02-14
; NUMBER OF SEQ ID NOS: 71
; SOFTWARE: FastSeq for Windows Version 4.0

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; SEQ ID NO 44
; LENGTH: 1363
; TYPE: PRF
; ORGANISM: homo sapiens
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: (1)...(1363)
; OTHER INFORMATION: Xaa = Any Amino Acid
US-09-775-685-44

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Query Match      41.6%; Score 3037; DB 21; Length 1363;
Best Local Similarity 45.3%; Pred. No. 2e-273;
Matches 621; Conservative 254; Mismatches 441; Indels 56; Gaps 14;

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QY 80 KYHHGSLALPRTTCK-HQHPVDNAGLFCMFPMSLSLARVAHKKGELSMEDVMSLK 138
DB 24 RYDPSLKTMLPRPCALAPNPVDDAGLSFAFMSWLPVWVKGRQ-RLTVDTLPPLST 82
QY 139 HESSDVNCRRLERLMOBELNEVGPDASLRVWVIFCRTLISIVCLMTOLAGFSGPA 198
DB 83 YDSDTNAAKFRVLMDEVARVGEKASLSHVWKKFORIVLMDIVANILCIITMAAIGPT 142
QY 199 FVWKHLELYQATESNLQYSLILVGLLLEIVRSMSLALTMALNRTGYRLGAILTMA 258
DB 143 VLIHQILOQTERTSKGVWVGIGICIALEFTEFVFWMALAMAINRTAIRKVALSTLV 202
QY 259 FKILIKINIKESLGLINICSDGORMEBAAGVSLAGPVAAILGMITVYILGPT 318
DB 203 FEMLVSKTLTHISVGVNLISDSYSLEFALFCLPATIPLMFCAAVAFILIGPT 262
QY 319 GFLGSAFELFYPPAMFASRLTAFERRKCYAATDEROYKNEVITYIKFKIMAWYKAS 378
DB 263 ALIGISVYLFIVQFMALNSFRSALLVTDKRVQNMEEFTCLRLIKMAWESFT 322
QY 379 QSVOKITREERRILKEKAFOSITVGVPIVNVIASVTFESVHMTGLDFDLAQAFVTVT 438
DB 323 NTIODIRRRERKLEKAGFVQSGNSALAPIVSTAIYVLTLSCHILLRKLAPAVAFSIVA 382
QY 439 VFNMSMTALVTPSVKSLSEASVANDRFSLFMEVNHAKKRPASPHIKIEKNTLA 498
DB 383 MFVNMKESIALPFSIKAAEAVNSLRMRKILDKSPSYIOPEDPDVYLLAANTLT 442
QY 499 WDSHSSISQSPKLPKMKDKRASRGKKEKVRQLOTEHQAVLAEOKGHLLDSDRPS 558
DB 443 WEH-----EASRSTPKLONOKRHLCCKORSEAYSERSPPA-----ATG 484
QY 559 PEEBCKNHILGHLRLQRTLSIDLEIOEKLVGICGVSQKSLISAILGQMTLEGS 618
DB 485 PEEQSDS-----LKSVLHSISFVVRKGIIGICGVSGKSSLLAALLGQMOLOKV 536
QY 619 IALSCTFAYVAQAMILNATLRDNLFGKEYDEBRVNSVLSCLRPDLAILPSSDLET 678
DB 537 VAANGTLAYVSOQAMIFHGVRNELLFGEKYDQRYOHTVAVCGIQDKDLSNLPYGDLEI 596
QY 679 GEGGANLSGGORISARALYSRSTIYIIDDPLSALDAVGNHIFNSAIRKHKSKTYL 738
DB 597 GEGKLNLSGGORISARALYSRSTIYIIDDPLSALDAVGNHIFNSAIRKHKSKTYL 738
QY 739 FVTHOLOLVDCDEVIFMKSGCTITERTGTHELMNLNGVATIFNNL--LLETP----- 790
DB 657 LVTHOLOLFESCDDEVILLEDGEICEKGTHELMEMERGVRKALHNLGLDFKDEHLYNA 716
QY 791 -----FVEINSKKETSGSOKSDCKPRTGSIKKEKAVPREGQVQLEEKGGV 841
DB 717 AMVEAFKESPAEREDAVLAPGNEKDGKSEKES--EFVDVTKPEHQLIQTESPQDGT 774
QY 842 PMSVYGVYIOAGGPLAFVLMFLNVTAFSTFWMLSVYIKOGSGNTTVTNGNT-- 899
DB 775 TMTYTHYIKASGGYLSLTFTVFLFMTLMSAASNMWLGIMLDKGRMTCGGPQGNATMC 834
QY 900 SVDSMDK-NPHMOYVASIYALSMAVMLIKAIRGVVAVGTLVASSRLDELFRRILRS 958

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DB 835 EGVGAVLADIGOHV--YQWVYTASVFMVLFVGVTKGFEVFTKTLTMASSSLHDVFDKILKS 892
QY 959 PMKFEOTTPPGRIILNRSKMDVDVRLPROAEFIONVILFFCVGMAGVFWPLVAV 1018
DB 893 PMSEFDTTPGRILNRSKMDVDVRLPROAEFIONVILFFCVGMAGVFWPLVAV 952
QY 1019 GPVILFESVLIHSRVILREILKRDNTQSPFSLTSSIOGLATTHAANYGQEFLLRYQ 1078
DB 953 ASLAVGFILLRIFHRVQELKAVENSRSPWFHITSSMOGLITHAYKKESCI---T 1009
QY 1079 ELDDNQAPFELFTCAMRLAVRLDLISALITTTGIMVLMHGOIPPAVAGLAISAVQ 1138
DB 1010 TLNDENSHLLYFCALRMFALRMDVLMNLTFTVALLVTLFSFSSITSSKGLSTLY 1069
QY 1139 LTGLFQFTVPLASTERTFVSERINRYITLSLEAPARKKNAKPSDWMQEGVTEMA 1198
DB 1070 LSGILOCVBRTGETQAKFISVLELRREYSTCVCECHNPLKVGTCPPDWPSEXGRTYRDY 1129
QY 1199 EMRYRENLPVLKVSFTTIRKKEIGIVGRSGKSSLGMAFLVRLSGGCIKIDGVR 1258
DB 1130 QMRKRDVPLVDSLNINIOSGOTVIGRTSGKSSLGMAFLVRLPVPASGTIFIDEVDI 1189
QY 1259 SDIGLADLRKSLIIPQEPVLFSGTVSNLDPFNQYTEDOIMALEFTHKKECTIAQLPLK 1318
DB 1190 CILSLEDLFRKLVYIPQDPVLFVGTVRYNLDPFESHTEDEMQLVLEFRTFMKLPK 1249
QY 1319 LSEVYMNGDNFSGEQOLLCIARALLRCKILLDATAAMDETLLLOETIREAFAD 1378
DB 1250 LQAEVTNGENFSGEQOLLCIARALLRCKIILDEATASMSKTDPLQONTIKDAFKG 1309
QY 1379 CTMTFIAHRLHTVYGSRIWLAQGOVVEFDPVSLSNSRPEAAAE 1430
DB 1310 CTYLTIAHRLHTVYLCNDHVLVMEKGVIEFDKPREVLAEKEDSAF-ANLLAAE 1360

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RESULT 8
US-10-090-280-33
; Sequence 33, Application us/10090280
; GENERAL INFORMATION:
; APPLICANT: AVENTIS PHARMA SA
; APPLICANT: THE GOVERNMENT OF THE UNITED STATES,
; TITLE OF INVENTION: NUCLEIC ACIDS OF THE HUMAN ABC12 GENE, VECTORS
; TITLE OF INVENTION: CONTAINING SUCH NUCLEIC ACIDS, AND USES THEREOF
; FILE REFERENCE: ABC12 GENE
; CURRENT APPLICATION NUMBER: US/10/090, 280
; CURRENT FILING DATE: 2002-03-05
; PRIOR APPLICATION NUMBER: 60/272,759
; PRIOR FILING DATE: 2001-03-05
; NUMBER OF SEQ ID NOS: 46
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 33
; LENGTH: 1356
; TYPE: PRF
; ORGANISM: Homo sapiens
US-10-090-280-33

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Query Match      41.3%; Score 3016.5; DB 24; Length 1356;
Best Local Similarity 45.0%; Pred. No. 1.6e-271;
Matches 618; Conservative 253; Mismatches 438; Indels 63; Gaps 14;

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QY 80 KYHHGSLALPRTTCK-HQHPVDNAGLFCMFPMSLSLARVAHKKGELSMEDVMSLK 138
DB 24 RYDPSLKTMLPRPCALAPNPVDDAGLSFAFMSWLPVWVKGRQ-RLTVDTLPPLST 82
QY 139 HESSDVNCRRLERLMOBELNEVGPDASLRVWVIFCRTLISIVCLMTOLAGFSGPA 198
DB 83 YDSDTNAAKFRVLMDEVARVGEKASLSHVWKKFORIVLMDIVANILCIITMAAIGPT 142
QY 199 FVWKHLELYQATESNLQYSLILVGLLLEIVRSMSLALTMALNRTGYRLGAILTMA 258
DB 143 VLIHQILOQTERTSKGVWVGIGICIALEFTEFVFWMALAMAINRTAIRKVALSTLV 202

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QY 259 FKKLIKNIKREKSLGELINICSDGOMFEAAVGSLLAGGPVALLGMITVYIIIGPT 318
Db 203 FENLVSEKTLTHISVGEVLNLTSSDYSLEFEALFCPLPATIPILMWCAAYAFIIGPT 262
QY 319 GFLGSAVFIIFYPAMMFASRLTAYFRKRCVAATDERVQKMEVLTITKFIKIMYAMVKAFS 378
Db 263 ALIGISYVIFIPVQMEAKINSAFRSALIVTDKRVQTMNEFLTICIRLIKIMYAMKSFT 322
QY 379 QSVOKIREERERILEKAGYFOSITVGVAPIVVYIASVYTESVHMTLGFDLTAQAQFVVT 438
Db 323 NTIODIRREERKLEKAGFVQSGNSALAPIVSTIAIVLTISCHILLRKLTAAPAFAVSYIA 382
QY 439 VFNMTFALKVTPPSVVSLSASAVADRFKSLFMEEVHMIKKNPASPBIKIEKKNATLA 498
Db 383 MFNWKFSIALPSPISAKAMEANVSLRMRKILIDKSPSYITTPEDPDVLLANATLT 442
QY 499 WDSHSSIONSPLKTPMKKDKRASRGKKEKVRQLORTHOAVLAEOKGHLLDSDERPS 558
Db 443 WEH-----EASRKSTPKKLOKQKRLCKKORSEAYSERPPA-----KG-----ATG 484
QY 559 PEEBEGKHILGHLRQRTLSIDLEIOEGKLVGICGSVSGKTSLSAIIIGOMTLLEGS 618
Db 485 PEEQSDS-----LKSVLHSISFVVRKGIIGICGVSGKSSLLAALLGQOQLOKV 536
QY 619 IAIISGTAYVAQOAMILNATLRDNLILGKEYDERYNSVLSCLRPDLALIPSSDLTEI 678
Db 537 VAVNGTLAYVQOAMIFHGNVRENILGEEKYDHQRYQHTYAVCGIQLODLSNLPYGDLEI 596
QY 679 GERGANLGGGROGRISTARALYSRSIYIIDDPLSALDAVHNIHFNSAIKHKLSKTVL 738
Db 597 GERBLNLSGGGROGRISTARAVYSDROLXLDPLSADAVAHGKAVFEELCIGTKIRGKTIV 656
QY 739 FVTHQLOLVDCDEVIFEMKECCITERGTHERELMNLNGDYATIFNVL--LIGETP----- 790
Db 657 LVTHQLOFLESCDDEVILLEDGEICEKGTHKELMEERGRYAKLIHNLKQLOKDEPHLYNA 716
QY 791 -----PEINSKKETSSGOKKQKTKGSIKKERKAVKPEQOVLLEKGGSV 841
Db 717 AMVEAFESPEREDAVLAPGNEKDEKESETS--EVDVTKVPEHQLQTESPOQETV 774
QY 842 PMASYGYVIOAGGPLAFVILMALFVLMVNGSTASTVWLWISWIKOGSNTVTGNET-- 899
Db 775 TWKTYHYIRKASGYLSLFLVFLFLMIGSAFSNMMLGMLDKSGMTCGPGGNKRM 834
QY 900 SVSDSMKD-NPHMOYASIVALSMAVMLILKAIKGVVVFVKGTSLASRLHLEFRILRS 958
Db 835 EVGAVLADIGOHV--YQMVYTAAMVFMVFGVTKGFVETKTTMASSSLHDTVPDKILKS 892
QY 959 PMKEFDTPPGRIINRSKMDDEVDRPLPQAEMLQNVILVFCVGLAGVFMFLVAV 1018
Db 893 PMSEFDTPPGRIINRSKMDDELDRPLPFAENFLOQFMFVAVFLVLAAVFAVAVLLV 952
QY 1019 GVALTILSVLHIVSRVILRELKRLDNITQSPFLSHITSSIGLATIHAYNGOEFILHYQ 1078
Db 953 ASLAVGEFILLIRIHRGQELKKEVENSRSRPMFTHITSSMOGLGIIHAYGKKECITYH- 1011
QY 1079 ELDDNOAPEFLFCAMRWLAVRLDLSIALITTTGMLIVMHQOIPRAYGLAISAVQ 1138
Db 1012 -----LLYFNCALRMFALRMDVLMNLTFTVALVLTLSFSSISSTSGSLSTIYIQ 1062
QY 1139 LTGLFOFTVRLASFEARFETVERIINHITKLSLEAPARIKKNKAPSPMPQEGEYTFENA 1198
Db 1063 LSLGLQCVRGTEQAFETSVELLREYISTCVPECTHPLVGTCPKMPSCGETTFEDY 1122
QY 1199 EMRYRENPLVLKRVSEFTIKREKIGIYGRGSGKSSLGMLFRLVELSGCIRKIDVRI 1258
Db 1123 QMRKRDMPVLVDLSNLNITQSGVQIVGRGSGKSSLGMLFRLVEPASTIFIDEVDI 1182
QY 1259 SDGLADRSKLSIIPQEPVLFSGTVRSNDLPFNQYTEDQIMALERTHMEKCIAPL 1318
Db 1183 CILSLEDLRTKLTIVIPQBPVLFVGTVRYNLDPFESHTEDEMLQVLETFEMDTIMKLPK 1242
QY 1319 LESEVMENGDMFVGERQLLICIARALLRCKIILIDEATAMQDETDLLOETIREAPAD 1378

Db 1243 LQAEYENGEMFVSGERQLLICIARALLRCKIILIDEATAMQDETDLLOETIREAPAD 1302
QY 1379 CTMTLHARLHVLGSDRIWYLAQGYVEDTPSVLLSNDSPRYAMFAAE 1430
Db 1303 CTVTIAHRLVTLNCHVILVMEKNGYIEFDKPEVLAEKPDASAF-AMLLAAE 1353
RESULT 9
US-10-090-280-34
; Sequence 34, Application US/10090280
; GENERAL INFORMATION:
; APPLICANT: AVENTIS PHARMA SA
; APPLICANT: THE GOVERNMENT OF THE UNITED STATES,
; TITLE OF INVENTION: NUCLEIC ACIDS OF THE HUMAN ABC12 GENE, VECTORS
; FILE REFERENCE: ABCC12 GENE
; CURRENT APPLICATION NUMBER: US/10/090,280
; PRIOR FILING DATE: 2002-03-05
; PRIOR FILING DATE: 2001-03-05
; NUMBER OF SEQ ID NOS: 46
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 34
; LENGTH: 1359
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-090-280-34
Query Match 41.3% Score 3015; DB 24; Length 1359;
Best Local Similarity 44.8%; Pred. No. 2.3e-271;
Matches 618; Conservative 255; Mismatches 432; Indels 74; Gaps 15;
QY 80 KUNHGSALKPIRTTCK-HQHPVONAGLFCGMPFSWLSLARVAHKKGELSMEDVWSL 138
Db 24 RYDSLSKTMIPVRCAHARPRVVDAGLSFATSWLTPVWVKYRQ-RLVDTLPPLST 82
QY 139 HESSDVNCRRLERLMOELNEVGPDAASLRVWVIFCRTLILSYICLMTITOLAGSGPA 198
Db 83 YDSSDTNAKRRVRLMDEVARVGEKASLSHVWVKFQRTVIMDVANIICIIIMAAIGPT 142
QY 199 FMVNHLEYQATNESNIQSYLSLLVGLLIPETVMSGLATLWALNYRQVLRBAGAILTMA 258
Db 143 VLIHQLOQERTSGKWWGIGLCTALFAETFTVFPMALMAINTFARILKVALSTLV 202
QY 259 FKKLIKNIKREKSLGELINICSDGOMFEAAVGSLLAGGPVALLGMITVYIIIGPT 318
Db 203 FENLVSEKTLTHISVGEVLNLTSSDYSLEFEALFCPLPATIPILMWCAAYAFIIGPT 262
QY 319 GFLGSAVFIIFYPAMMFASRLTAYFRKRCVAATDERVQKMEVLTITKFIKIMYAMVKAFS 378
Db 263 ALIGISYVIFIPVQMEAKINSAFRSALIVTDKRVQTMNEFLTICIRLIKIMYAMKSFT 322
QY 379 QSVOKIREERERILEKAGYFOSITVGVAPIVVYIASVYTESVHMTLGFDLTAQAQFVVT 438
Db 323 NTIODIRREERKLEKAGFVQSGNSALAPIVSTIAIVLTISCHILLRKLTAAPAFAVSYIA 382
QY 439 VFNMTFALKVTPPSVVSLSASAVADRFKSLFMEEVHMIKKNPASPBIKIEKKNATLA 498
Db 383 MFNWKFSIALPSPISAKAMEANVSLRMRKILIDKSPSYITTPEDPDVLLANATLT 442
QY 499 WDSHSSIONSPLKTPMKKDKRASRGKKEKVRQLORTHOAVLAEOKGHLLDSDERPS 558
Db 443 WEH-----EASRKSTPKKLOKQKRLCKKORSEAYSERPPA-----KG-----ATG 484
QY 559 PEEBEGKHILGHLRQRTLSIDLEIOEGKLVGICGSVSGKTSLSAIIIGOMTLLEGS 618
Db 485 PEEQSDS-----LKSVLHSISFVVRKGIIGICGVSGKSSLLAALLGQOQLOKV 536
QY 619 IAIISGTAYVAQOAMILNATLRDNLILGKEYDERYNSVLSCLRPDLALIPSSDLTEI 678
Db 537 VAVNGTLAYVQOAMIFHGNVRENILGEEKYDHQRYQHTYAVCGIQLODLSNLPYGDLEI 596

Db 775 TWKTYHTYIKASGGYLLSLTFTVFLMLMIGSAFNNMGLMDKGRMTCGPGGNRTMC 834
QY 900 SVSDSMKD-NPHMOYASIALSMAVMLILKAIGVYFVKGTLFASRLHDELFRRLIRS 958
Db 835 EGVANVLADIGOHV--YOMVYTAASVFMVGVYKGFYFTKTLMASSSHDPTVDKILKS 892
QY 959 PMKFEDTTPGRLINRFSKMDDEVDRLPQAEKFIQNVILVFCVDMAGVFPWFLVAV 1018
Db 893 PMSFEDTTPGRLINRFSKMDDELDRLPFAENFLQOFEMVVEILVLAAPFAVLIVV 952
QY 1019 GPVILFVSVAHVSRLVIRELKRDNITOSPFLSHITSSIOGLFTIAYNKGOFELHRYQ 1078
Db 953 ASLAVGEFILLRIFHRGVQELKVENVSRSFPHITSSMOGLTIHAYGKRESCT--T 1009
QY 1079 ELIDNDAPEFLFTCAMRWLAVRDLISIALITTTGLMIVMHQIPPAVAGLAISYAVQ 1138
Db 1010 TLNDENSHLLYFNCALRWALRMDVLMNLTFTVALLVTLSPSSISGSLSTYIQ 1069
QY 1139 LTGLFOFTVRLASFTEARFTSVVERINHYIKTSLSEAPARIKKNAPSPDMPQEGEVTEBNA 1198
Db 1070 LSGLLQVCVRGTETQAKFTSVELLREYISTCPECTHPLKVGTCPRDMPKSGEITFERDY 1129
QY 1199 EMRRRENPLVLYKVSFTIKRKKEIGIVRGSGKSSIGMALFRLVELSGCIRKIDGVR 1258
Db 1130 QMRARDTTPVLDSINLNIOGQGVGVIGRTGSGKSSIGMALFRLVEPASGTIFIDEVDI 1189
QY 1259 SDIGLADRSKLSIIPQEPVLFSGTVSNNLDPFNQYTEDQIMDALERTHMECIAQLPLK 1318
Db 1190 CILSLEDLRTKLYIIPQDPVLF-----IMKLEPEK 1218
QY 1319 LESVEMENGDNFVSGEROLLCIARALLRHCILILDEATAAMDTEDDLIOETIREAPAD 1378
Db 1219 LQAEVTEGENFVSGEROLLCVARALLRNSKIILDEATAASDKTDLVONTIKDAFKG 1278
QY 1379 CTMTIARHRTVVGSDRIMVLAGOVVEPTPSVILSNDSSRFYAFMAAE 1430
Db 1279 CTVTLIARHRTVINCDBVLVMEKNGKYLEFKPEVLAEKPDPSAF-AMLLAAE 1329

RESULT 11
US-09-760-470-51
; Sequence 51, Application US/09760470
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
; FILE REFERENCE: PT239
; CURRENT APPLICATION NUMBER: US/09/760,470
; CURRENT FILING DATE: 2001-01-16
; Prior application data removed - consult PALM or file wrapper
; NUMBER OF SEQ ID NOS: 89
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 51
; LENGTH: 569
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (243)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (244)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (250)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (437)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-760-470-51

Query Match 39.2%, Score 2865, DB 21, Length 569;

Best Local Similarity 99.1%; Pred. No. 5,2e-258;
Matches 564; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
QY 869 NVGSTAESTWMLSYWIKOGSGNTVTGNETSVSDSKNDPNHMOYASIALSMAVMLIL 928
Db 1 NVGSTAESTWMLSYWIKOGSGNTVTGNETSVSDSKNDPNHMOYASIALSMAVMLIL 60
QY 929 KAIGGVYFVKCTLAASSRLHDELFRRLIRSPMKFEDTTPGRLINRFSKMDDEVDRLPF 988
Db 61 KAIGGVYFVKCTLAASSRLHDELFRRLIRSPMKFEDTTPGRLINRFSKMDDEVDRLPF 120
QY 989 QAEMFIONVILVFCVGMIAVFPMPFLVAVGPVILFVSVAHVSRLVIRELKRDNITOS 1048
Db 121 QAEMFIONVILVFCVGMIAVFPMPFLVAVGPVILFVSVAHVSRLVIRELKRDNITOS 180
QY 1049 PFLSHITSSIOGLFTIAYNKGOFELHRYQELIDNDAPEFLFTCAMRWLAVRDLISIA 1108
Db 181 PFLSHITSSIOGLFTIAYNKGOFELHRYQELIDNDAPEFLFTCAMRWLAVRDLISIA 240
QY 1109 LITTTGLMIVMHQIPPAVAGLAISYAVOLTGLFOFTVRLASFTEARFTSVVERINHYIK 1168
Db 241 LITTTGLMIXLMHQPAPPAVAGLAISYAVOLTGLFOFTVRLASFTEARFTSVVERINHYIK 300
QY 1169 TSLSEAPARIKKNAPSPDMPQEGEVTEBNAEMRRRENPLVLYKVSFTIKRKKEIGIVGR 1228
Db 301 TSLSEAPARIKKNAPSPDMPQEGEVTEBNAEMRRRENPLVLYKVSFTIKRKKEIGIVGR 360
QY 1229 TSGKSSIGMALFRLVELSGCIRKIDGVRISDIGLADRSKLSIIPQEPVLFSGTVSNNL 1288
Db 361 TSGKSSIGMALFRLVELSGCIRKIDGVRISDIGLADRSKLSIIPQEPVLFSGTVSNNL 420
QY 1289 DPFNQYTEDQIMDALERTHMECIAQLPLKLESEVEMENGDNFVSGEROLLCIARALLRHC 1348
Db 421 DPFNQYTEDQIMDALERTHMECIAQLPLKLESEVEMENGDNFVSGEROLLCIARALLRHC 480
QY 1349 KILILDEATAAMDTEDDLIOETIREAPADCTMTIARHRTVVGSDRIMVLAGOVVEF 1408
Db 481 KILILDEATAAMDTEDDLIOETIREAPADCTMTIARHRTVVGSDRIMVLAGOVVEF 540
QY 1409 DTPSVILSNDSSRFYAFMAAENKVAVKG 1437
Db 541 DTPSVILSNDSSRFYAFMAAENKVAVKG 569

RESULT 12
US-09-760-483-464
; Sequence 464, Application US/09760483
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
; FILE REFERENCE: P0214
; CURRENT APPLICATION NUMBER: US/09/760,483
; CURRENT FILING DATE: 2001-01-16
; Prior application data removed - consult PALM or file wrapper
; NUMBER OF SEQ ID NOS: 856
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 464
; LENGTH: 569
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (243)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (244)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (250)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (437)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids

US-09-760-483-464

Query Match 39.2%; Score 2865; DB 21; Length 569;
Best Local Similarity 99.1%; Pred. No. 5.2e-258;
Matches 564; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 869 NNGSTAFSTWMLSYWKOGSGNTTTRGNETSVDKMDPNHMOYASIALMAVLL 928
DB 1 NNGSTAFSTWMLSYWKOGSGNTTTRGNETSVDKMDPNHMOYASIALMAVLL 60
QY 929 KAIRGVVFKGTLRASSRLHDELFRRLRSMPKFFDTPGRLINRSKMDDEVNLP 988
DB 61 KAIRGVVFKGTLRASSRLHDELFRRLRSMPKFFDTPGRLINRSKMDDEVNLP 120
QY 989 QAMFQONVILVFCVGMAGVPMFLVAVGLVILFVSVAIYSRVILRLKRLDNTQS 1048
DB 121 QAMFQONVILVFCVGMAGVPMFLVAVGLVILFVSVAIYSRVILRLKRLDNTQS 180
QY 1049 PFLSHITSSIOGLATIHAYNKGQEFRLHRYOELLDDNOAPELFTCAMRWLAVERL 1108
DB 181 PFLSHITSSIOGLATIHAYNKGQEFRLHRYOELLDDNOAPELFTCAMRWLAVERL 240
QY 1109 LTTTGIMTVLMHGOIPPAVAGLAISYAVOLTGLFOFTVRLASETEARFTSVRINHYK 1168
DB 241 LTTTGIMTVLMHGOIPPAVAGLAISYAVOLTGLFOFTVRLASETEARFTSVRINHYK 300
QY 1169 TISLEPARIKKAPSPDPOGEVTFENAEKRYRENPLVYLKVSFTTKPKKIGIVR 1228
DB 301 TISLEPARIKKAPSPDPOGEVTFENAEKRYRENPLVYLKVSFTTKPKKIGIVR 360
QY 1229 TSGGKSSIGMALFRLVELSGGCIKIDGVRSIDGLADLRSKSLTIPOEPLFSGTVRSNL 1288
DB 361 TSGGKSSIGMALFRLVELSGGCIKIDGVRSIDGLADLRSKSLTIPOEPLFSGTVRSNL 420
QY 1289 DEPNQYTEDOIMDALERTHKECIAOLPLKLESEVMENGNFSGVEROLICIRALLRHC 1348
DB 421 DEPNQYTEDOIMDALERTHKECIAOLPLKLESEVMENGNFSGVEROLICIRALLRHC 480
QY 1349 KIILIDEATPAADTEFDLLOETIREAPADCTMTTAHRLHVLGSDRLMVLAAOGVVER 1408
DB 481 KIILIDEATPAADTEFDLLOETIREAPADCTMTTAHRLHVLGSDRLMVLAAOGVVER 540
QY 1409 DTPSVLLSNDSSRFYAMPAAEKNAVKG 1437
DB 541 DTPSVLLSNDSSRFYAMPAAEKNAVKG 569

RESULT 13
US-09-668-628-1
; Sequence 1, Application US/09668628
; GENERAL INFORMATION:
; APPLICANT: Krasnow, Randi E.
; APPLICANT: Baughn, Mariah R.
; TITLE OF INVENTION: ATP-BINDING CASSETTE PROTEIN
; FILE REFERENCE: PC-0021 US
; CURRENT APPLICATION NUMBER: US/09/668,628
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: PERL Program
; SEQ ID NO 1
; LENGTH: 1331
; TYPE: prt
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: Incyte ID No: 7481813CD1
US-09-668-628-1

Query Match 36.2%; Score 2643.5; DB 20; Length 1331;
Best Local Similarity 40.9%; Pred. No. 1.4e-236;
Matches 548; Conservative 258; Mismatches 487; Indels 47; Gaps 7;

QY 99 HPVNDAGLFSCMTFESWMLSLARVAHKKGLSMEVDNLSKHESSDVNCRRLERLOEELN 158
DB 33 YPLDNGLFESYLVSWLTP-L-MIOSLSRLIDENTIPPLSHDASDKAVOHLRLMEEV 91
QY 159 EVGPDAASLRVWVIFCRTRILISYICMTOLAGSGPAPMKHLETOATESNLOY 218
DB 92 RRGIEKASVLLWMLRFQRTLIFDALGICFCIASVGLPILILPKILEYSEBQGNVHG 151
QY 219 LILVGLLLEIVRSMLATMALNRTGVRLGCAITLMAFKILKIKNKESLGLIN 278
DB 152 VGCFLALFLEECVKSLSFSSSWIINORTAIRFAVASSFAPEKLOPKSVIHTSGEYIS 211
QY 279 ICSNDGQMEEAAGVSLLAGGPVVALGMIVANTLIGPGLGSANVIFYPAMFASR 338
DB 212 FETGDVNYLEEGVCGYGLVLTICASLVCSISFTIIGYAFALICYLVLFLPAMTR 271
QY 339 LTAVFRRKCYAANDERQKNNEVLTETKMTAMVAFSOSYOKIREERRILEKAGY 398
DB 272 MAYKAOHHTSEVDQRIKRVSEVITCKIKMTWEKPAKIEDLRKREKILKEGLV 331
QY 399 QSTTVGAPLVVIVASVTFPSVHMTGFDLTAQAFTVTVPNSMFPALKVTPSVKSL 458
DB 332 QSTSLITFLIIPVATVAVWLHTSLKLAASAFESMLSLMLRLSVFVPLAVKGP 391
QY 459 EASVAVDRFSLFMEVNHKIKKPPASPHIKIEMKNTIAMDSHSSIQNSPKLTPMKK 518
DB 392 NSKSAVRFKRFPLQESPVFVYOTLDPKALVEETLMOOTCPGIVG 442
QY 519 DKRASRCKKRVKQLOTEHQAVLAEBOKHLLDSDRP-----SPEEBEKHILHRL 574
DB 443 -----ALELERNGH-ASEGMRPRDALGPEEGNS-----L 472
QY 575 QRLHSLIDEIOGKLVGICGVSQKTSLSIALGOMTLEGSIALSGTFAVVAQOAT 634
DB 473 GPRLHKINTLVVSGMMLGVCGNTGSGKSSLSIALHEMHLEGSVQGSGLAVVPOQAWI 532
QY 635 LMTLRNLIIFGEKYEDEERNVNSCLLRDLAALPSSDLTEIGERGANLSGGQORIS 694
DB 533 VSGNIRENIMGAYDKARVLOVLRHCCSLNRDELRFPGMTGEGERGLMISGQOKRIS 592
QY 695 LARALYSRISYILDDPLSLADAHVGNHIFNSAIRKHLKRYLVFVTHOYLVDCSEVI 754
DB 593 LARAIVSDROITVLLDPLSLADAHVGNHIFNEECIKTLRKRYVAVLTHOYLVDCSEVI 652
QY 755 FMKEGCTTGERGHEELMNLGDAYTIFNNLLGETPREVEINSKRETSQSKQDKPKT 814
DB 653 LLENGKICENGTHSELMQKKGYAOLIQKHKEATSDMLDGTAKIAKPRVESQALATSL 712
QY 815 GSTIKKERAKVPEGQVLEKQOGSVPMVSUYGVYIOAGGPLAFVLYALMLNNGSTA 874
DB 713 EESLNGNAV--PEHOLQOEEMEGSLSMRVYHNYIOAAGGVVSCIFPFVVLVYELTI 770
QY 875 FSTWMLSYWKOGSGNTTTRGNETSVDKMDPNHMOYASIALMAVLLKAIKRG 933
DB 771 FSTWMLSYWKOGSGNTTTRGNETSVDKMDPNHMOYASIALMAVLLKAIKRG 830
QY 934 VEFVKGTLRASSRLHDELFRRLRSMPKFFDTPGRLINRSKMDDEVNLPFOAEMF 993
DB 831 GIFTKTVRKASTALHNKLFKVCRCFMSFDTPIGRLNLCFAGDLEQLDQLPIFSEGF 890
QY 994 IQNVILVFCVGMAGVPMFLVAVGLVILFVSVAIYSRVILRLKRLDNTQSPLSH 1053
DB 891 LVLSLWIAVLLIVSVLSPVILLMGALINIVICFYMMFKRAIGVFRLENYRSPLESH 950
QY 1054 ITTSIOGLATIHAYNKGQEFRLHRYOELLDDNOAPELFTCAMRWLAVERL 1113
DB 951 ILSNLSIOGLSSIHVYKTEDEISQFKRLTDQNNVLLFLSSTRMMLRLLEIMNIVYLAV 1010
QY 1114 GLMIVLMHGOIPPAVAGLAISYAVOLTGLFOFTVRLASETEARFTSVRINHYK 1173
DB 1011 ALFVARGISSTPYSFKVMAVNIIVLQASSPQATARIGLTEAQTAVERILQYMKMCVSE 1070

QY 1174 APARINKKAPSPWPOGEVTEFENAEKREKRENTPLVKKVSTIKREKIGVGRSGK 1233
Db 1071 APILHMGTSOPQPMQHGELIFQDYHMKYRDNPVLAGINTLRGHEVVGIGRGSGK 1130
QY 1234 SSIGMALFRLVELSGGCIKIDGRISDIGLADIRSKLSITPOBPVLESGVSRNLDPFQ 1293
Db 1131 SSIGMALFRLVEVMAGRIIDVDICISIGEDIRSKLSVTPDPVLLSGIRRNLDPEFR 1190
QY 1294 YTEDQIMDALERTHMECAIOLPLKLESEVWENGDNFVSEROLLCTARALLHCKLIL 1353
Db 1191 HFDQIMDALERTFTLRKAIKSPKLTHTDVENGDNFVSEROLLCTARAVLRNLSKIL 1250
QY 1354 DEKTAAMDPTDLIOETIREAFADCTMLTIAHRLHTVLSGSDRLMVAOCQVPEFDP 1413
Db 1251 DEKTAAMDPTDLIOETIREAFADCTMLTIAHRLHTVLSGSDRLMVAOCQVPEFDP 1310
QY 1414 LLSNDSREFYAFMAAENKV 1433
Db 1311 LRKKPSLFAALMATATSS 1330

RESULT 14

US-09-703-253-18
Sequence 18, Application US/09703253
GENERAL INFORMATION:
APPLICANT: Harris, Marie
APPLICANT: Donoho, Gregory
APPLICANT: Turner, C. Alexander Jr.
APPLICANT: Nehls, Michael
APPLICANT: Friedrich, Glenn
APPLICANT: Zambrowicz, Brian
APPLICANT: Sands, Arthur T.
TITLE OF INVENTION: Novel Human Transporter Proteins and
TITLE OF INVENTION: Polynucleotides Encoding the Same
FILE REFERENCE: LEX-0081-USA
CURRENT APPLICATION NUMBER: US/09/703,253
CURRENT FILING DATE: 2000-10-31
PRIOR FILING DATE: 1999-11-02
NUMBER OF SEQ ID NOS: 25
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 18
LENGTH: 1379
TYPE: PRN
ORGANISM: homo sapiens
US-09-703-253-18

Query Match 36.1%; Score 2637; DB 21; Length 1379;

Best Local Similarity 40.5%; Pred. No. 5.9e-236;
Matches 552; Conservative 256; Mismatches 504; Indels 48; Gaps 8;

QY 77 PKGYHHGLALPKRPTTCQHQHPVDNAGLFSCTFMSLSLARVAHKKGLSMEDWLS 136
Db 60 PKGYHDAALRMTDPRKPRPRP-QPLGLFSLYLVSMPL-MQSLRSLSLDENTIPPL 117
QY 137 SKHSSDVNCRRLERLMOELINEVGPDAASLRVWIFCRTLILSYVCLMITOLAGFSG 196
Db 118 SVHSDAKNQRHLRHWEEVSRGIRKASVLYVLRPRLIFDALGICFIASVYG 177
QY 197 PAFVAKHLETOATFESNLQYSLVGLLLETIVRSNLSLTAALNRTGVRRLGALT 256
Db 178 PILIPILFLESEQLNVHVGVLCEFLFSECVKSLSFSSSWIINQRTAIRQAASS 237
QY 257 MAEKILKLNKIKESIGELINICSDNGQRMFEAAVAGSLAGPVAAILGMINVILG 316
Db 238 FAEKLLQFVSVHITTSGEALISFTGDVNYLFEGVCGPLVLTICASLVTSISYFLIG 297
QY 317 PTGLISAVFLTFPAMMFASRLTAFFRRKCVAAATDERVQKMEVLYIKIKYAWYKA 376
Db 298 YTAITAILCYLIVPLEFVFMRAVKAQHHSSEVSDORIRVTSVLCIKIKMYTWKPR 357
QY 377 FSGSVQKIRREERIRLEKAGYFOSITGVAVPIVVVIVSVTFVSHMILGFLTAQAFTV 436

QY 358 FAKIIEBLRKRKLEKLCGLVOSLSTITLPIYVAFANVLIHLSKLKLAASMAFSM 417
QY 437 VTFVNSMTFALKVTPESVKSLSSEASVADRFKSLFLMEEVHMKRNPASPHITEKNAT 436
Db 418 LASINILRLSVFPVPIAVKGLTNSKSAVMRRKFFLOESPVYVOTLQDSKALVEEAT 477
QY 497 LAMDSHSSSIONSPKLTFRKKKDKRASRGKKVROLRQRTREHQAIVLAEOGHLLDSDER 556
Db 478 LSWOQCTPGIIVG-----ALELRNGH-ASEGMR 506
QY P-----SPEEEGKHILGHLRLQRTLSIDLEIQEGLVIGSGVSGKTSLSALIGOM 612
Db 507 PRDALGPEEBGNS-----LGEPLKINLVYSKGMMLVCNGTSGSKSLSLALEM 558
QY 613 TLEGSIAISGTAAYVAQAAMILNATLRDNLGKEYDEERYNSVNSCCRLPDLALPS 672
Db 559 HLEGSVGOGLAYVPOQAMIVSGNIRENIMLGAVDKARYLOVLHCCSILNRDLLELP 618
QY 673 SDLTEIGERGANLSSGORORISLARALYSRSTIYIILDDPLSALDAHGHFNPSAIRKHL 732
Db 619 GDMTEIGERGLNLSGGOKRISLARAVSDROYLDDPLSADVAHGHKHFEECIKKT 678
QY 733 KSKTVLEFVTHOLOXYVDCDEVIEFMKEGCIETRGTHHEELMNLNGDYATIFNNLLGETPPV 792
Db 679 RGTIVLVTHOLOXYLEFCGQIILLENKICENGTHSELMQKKGKQADLOKMKHEATSDM 738
QY 793 EINSKKTSGSOKKSQDKPRTGSIKKKAVKPEEGOLVLEEGGGSVPWSYGVYIOA 852
Db 739 LQDTAKIAERPKVESQALATLSLESLNGNAV--PEHOLTOEEEBEESLSRKYVHHYIOA 796
QY 853 AGGPLAVLIMALFMLNWSAFSTWMLSWIKSGNVTYTRGNEFSVS-DSKKNDPM 911
Db 797 AGGTVASCITFEFVYLVFLTIFEFMWLSYLEGSGTNSREBNGTMADLGNADNPOL 856
QY 912 QYASIALSAWVALLIKAIRGVFVVKQTRASSRLDELFRRILRSRPMKFFDTPGRI 971
Db 857 SFYLVYGLNALLILCVGCSGIFTKVTRKASVALLNKLKFKVRCRPMSEFDIPIGLR 916
QY 972 LNRFSKDMDEVYRLPROAEMFQNVILVFECVMIAGVFPFVLYVGLVILESVLIHV 1031
Db 917 LNCFAGLDEQDOLPLIFSEQFLVLSLMAVIAVLIVSLVSPYILMGAIVWICFIYMM 976
QY 1032 SRVLIRELKRDLNTOGSPFISHITSIOGLATIHAVNKGGOELHRYOELDDNOAPFLF 1091
Db 977 FKAIGVFKRLNYSRSLSHILNSLOGSSIHVIGKTEDFISQKRLTDQONNYLLIF 1036
QY 1092 TCAMRWLAVALDLISALITTTGLMIVLMHGOIPPAYAGLAISYAVOLYTGLEFTVRLAS 1151
Db 1037 LSTRWMLRLREIMTNVTLAVLFAVAGISSTPSRFVMAVNIVLQASSGFQATARIGL 1096
QY 1152 ETEARFTSVBRINHYIKTSLIADPARIKKAPSPDWPOGEVTEFENAEKREKRENTPLV 1211
Db 1097 ETEAOFVAVERRILOYMKVCSEADPLHMEGTSPOGWDQHGELIFQDYHMKYRDNPV 1156
QY 1212 KVSFTIKPKKIGIVGRSGKSSLSGMALEFRLVELSGGCIKIDGRISDIGLADIRSKLS 1271
Db 1157 GINTLRHEVAVVIGRSGKSSLSGMALEFRLVEVMAGRIIDVDICISIGEDIRSKLS 1216
QY 1272 IIPQPVLESGVSRNLDPFQYTEDQIMDALERTHMECAIOLPLKLESEVWENGDNFVS 1331
Db 1217 VIPQPVLLSTGIRFNNDPFRHTDOQIMDALERTFTLRKAIKSPKLTHTDVENGDNFVS 1276
QY 1332 VGEROLLCTARALLHCKLILDENTAAMDPTDLIOETIREAFADCTMLTIAHRLHTV 1351
Db 1277 VGEROLLCTARAVLRNLSKILIDEATSIDMETDPLIORTIREAFQCGTVIAHRTV 1336
QY 1392 LGSDRIMVLAOGVVEPDPVSVLSNDSRYAFMAAENKV 1433
Db 1337 LNCDHILVWNGKVEFDPREVLRRKPSLFAALMATATSS 1378

RESULT 15

```

US-09-775-685-46
: Sequence 46, Application US/09775685
: GENERAL INFORMATION:
: APPLICANT: Turner, C. Alexander Jr.
: APPLICANT: Mathur, Brian
: APPLICANT: Wang, Xiomang
: APPLICANT: Abuin, Alejandro
: APPLICANT: Friedlich, Glenn
: APPLICANT: Zamorovic, Brian
: APPLICANT: Sands, Arthur T.
: APPLICANT: Donoho, Gregory T.
: APPLICANT: Hilbun, Erin
: TITLE OF INVENTION: Novel Human Transporter Proteins and Polynucleotides Encoding the
: TITLE OF INVENTION: Same
: FILE REFERENCE: LEX-0128-USA
: CURRENT APPLICATION NUMBER: US/09/775, 685
: CURRENT FILING DATE: 2001-02-02
: PRIOR APPLICATION NUMBER: US 60/179, 973
: PRIOR FILING DATE: 2000-02-03
: PRIOR APPLICATION NUMBER: US 60/182, 422
: PRIOR FILING DATE: 2000-02-14
: NUMBER OF SEQ ID NOS: 71
: SOFTWARE: FASTSEQ for Windows Version 4.0
: SEQ ID NO 46
: LENGTH: 1216
: TYPE: prt
: ORGANISM: homo sapiens
: FEATURE:
: NAME/KEY: VARIANT
: LOCATION: (1)...(1216)
: OTHER INFORMATION: Xaa - Any Amino Acid
US-09-775-685-46

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Query Match      35.4%; Score 2583.5; DB 21; Length 1216;
Best Local Similarity 43.6%; Pred. No. 4.8e-231;
Matches 535; Conservative 227; Mismatches 410; Indels 55; Gaps 13;

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QY 80 KYHGLSLAKPRITCK-HQHPVDNAGLFSCMTFSLSLAFAHKKGLSMEDVWSLSK 138
DB 24 RDPDLKTMIPKPCARLAPNPVDAGLSPATFSLTPVWVKGYRQ-RLTYDTLPPLST 82
QY 139 HESSVNCRRLERLMOELENVGPDAASLRVWIFCFRRLILSYCLMIIQLAGSPGA 198
DB 83 YDSPTNAKRFVLDDEVARVGPKEKASLSHYVWKFQRTKRVLMQDIYANILCIIMAIQFT 142
QY 199 FMVKHLEVTQATESNLQYSLLVGLLTETIVSRMSLALFWALNVRTGVRILGAILTMA 258
DB 143 VLIHQILOQTERTSKVMWVGIGLCTALFATEFTKYFFMALAMAINRTAIRLKVALLSTLV 202
QY 259 FRKIILKNIKESLIGELINCSNDGORMFEAAGVSLAGSPVVAIIGMIYVNIIGFT 318
DB 203 FENLVSFTLTHISVGEVNLITLSDSYSLEFALPCPLPATPIILWFCAAVAFFILGPT 262
QY 319 GFLGSAVFLEFPYAMFASRLTAFFRRKCVATDERVOKMNEVYIKFKIMYAWYKAS 378
DB 263 ALIGISVYIIFPVOMFAKLSAFRRRSAILYTDKRVQTMNEELTCIRLIKMAEKST 322
QY 379 OSVOKIREERERILKAGYFOSITVGVAPIVVIVIASVTFVSVMTLGFDLTAQAFTVVT 438
DB 323 NTIODIRRRERKLKAGVFGNSALAPIVSTIAIVLISCHILLRKLTPAPVAFSVIA 382
QY 439 VENSMTFALKVTPESVKSISEASVAVDRFKSLFLMEVVMINKPKASPIKITEMKNATLA 498
DB 363 MENVKFSIALIPFSIKMAEAVNSLRKMKILIDKSPSYITOPEDPDTVLLANATLT 442
QY 499 WDSHSSSIONSPKLTPKMKKDRASRGKEKVRQLOQTEHOAVLAEQKGLLSDERS 558
DB 443 WEH-----EASRKSTPKLQNKRLCKQKSEANSERPPA-----KG-----ATG 484
QY 559 PEEEGKHIHLGLRLQRTLSIDLEIQGLVIGSGVSGKTSLSAIILOQMILLGSGS 618
DB 485 PEEGSDS-----LKSVLHSISFVVRKRGKITGICGNVSGKSSLLAALLQGMOLQKGV 536

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QY 619 IASGFAVVAQOAMTLNLTLPDNLIFGKEVDEERYNSVLNSCCLRPDLAILPSSDLTEI 678
DB 537 VAVNGTLAVSQAAMTEFHNRENLIFGKRYOHRTQHTVRCVGLQKDLSTNLPYGLTEI 596
QY 679 GERGANLSSGQORISLARALYSRISYITLDDPLSLADHAGNHFNPSAIRKLKSKTVL 738
DB 597 GERGLNLSSGQORISLAAYVSDROLYILDDPLSADVADHAKHVEECITKTLRKRTYV 656
QY 739 FVTHOLOLVDCDEVIFEMKEGCTTERGTHEELMNLNGDYATTFNNL-LIGETP----- 790
DB 657 LVTHQLOFLESCDEVILLEDGEICEKGTKEIMEERGRAKILHNLRGLOFQDPEHLVNA 716
QY 791 -----PVEINSKKETSGSOKSODKPRGTGSKKAKAPREGQVLEBKGGGSV 841
DB 717 AMVEAFKESPARREDAVLAPGNEKDEKESGTS--EVDVTKVPKHDIQTESPDQGV 774
QY 842 PMSVYGVYIOAAGPLAFVIALFPLMANGSTAFTSMWLSYNIKQSGNGTYYTGRNET-- 899
DB 775 TTKTYHTYIKASGGYLLSLFYVFLMIGSAFSAFMMWLGMLDKGSRMTCCGQGRMTC 834
QY 900 SVSDSKMD-NPHMOYVYASIALSMAYMLLKAIRGVYEVKGLRASRLHDELFRRLRS 958
DB 835 EVGAVLADIGQHV-YQWVYTSVMFVLVGYTKGFVFTKTLTMASSLHDVFDKILKS 892
QY 959 PKKFDTPTTGRLNRFSCMDQDEVDYRLFPQAMFIQNIYLVFCVGMLAGVFPMLVAV 1018
DB 893 PMSFDTPTGRLNRFSCMDQDEVDYRLFPQAMFIQNIYLVFCVGMLAGVFPMLVAV 952
QY 1019 GPLVILFVSLHIVSRVLRLEKRLDNIQSPFLSHITSSIOGLATIHAYNKGQEFLLRVQ 1078
DB 953 ASLAVGFILLKIFHRGVDELKVENVSPPMFTHTTSSMOGIGITHAGKKEST---T 1009
QY 1079 ELDDNQAPFLEFPCAMRLAVRLDLISALITTTGLMTVLHMGQIPPAVAGLAISYAVQ 1138
DB 1010 TINDENSHLVEFNCALRFALRMVDYLMNLIFFTVALLVTLSPSSISTSSKGLSISTIQ 1069
QY 1139 LGLQFOFYRLASEFTEARTSVERRINHYTKTSLERPAIKKAPBDMPOGEVYFEVA 1198
DB 1070 LSGLLQVCVTRGTQAKFTSVLELREYISTVCPECTHPLKVGTCRPMPSKGEITFRDY 1129
QY 1199 EMKRYRENLPVLAKVYSFTTKPREKIGIVRTGSGKSLGMLFRLVELSGGCXIKIDGRI 1258
DB 1130 QMRKYRNPVLVDSLNLNLOSQOTYGVRTGSGKSLGMLFRLVEPASGITFIDEVDI 1189
QY 1259 SDIGLADLRSKLSIIPQEPVLESGTVR 1285
DB 1190 CILSLEDLRTKLTLPQDPVLEFVGTVR 1216

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Search completed: August 11, 2002, 11:12:12
Job time: 6682 sec

